

Evaluation Process for Solid Waste Management

Iowa Department of Natural Resources

**Advisory
Committee**

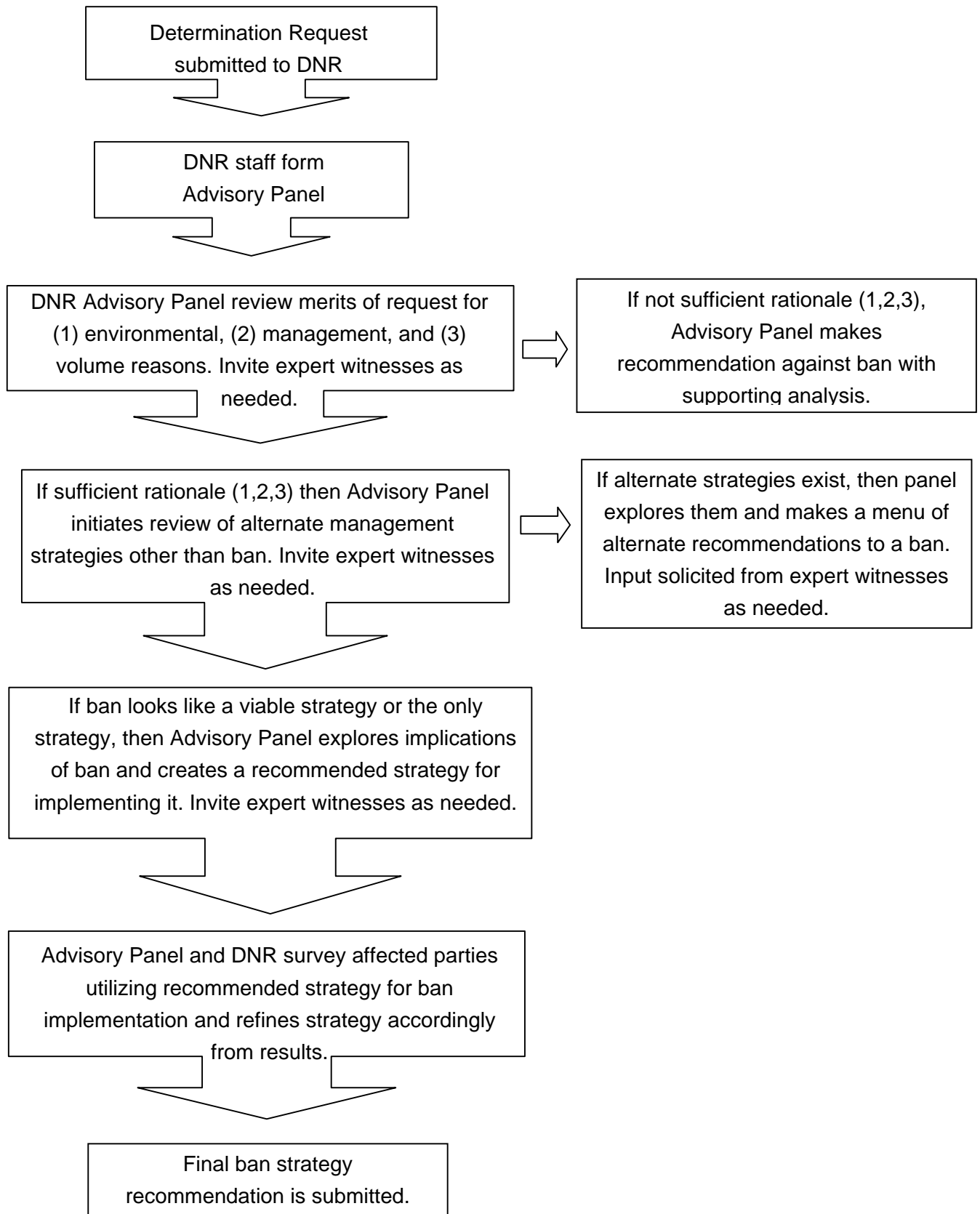
Determination
Procedure for
Solid Waste
Disposal Bans

March 2003

Table of Contents

Procedure Flow Chart	3
Introduction	4
Rationale	6
Premises	8
Procedure	9
Request for Determination Submitted	9
Systemic Review of Feasibility and Impacts by Advisory Panel	9
Public Input	15
Recommendation and Report to DNR Director by Advisory Panel	15
Final Determination Recommendation by DNR	15
Process and Advisory Committee	16
Advisory Committee to Develop a Determination Procedure for Solid Waste Disposal Bans	16
Appendix 1: SWANA Policy on Solid Waste Disposal Bans	18
Appendix 2: Preliminary Test – Survey of Four Populations	20

Procedure Flow Chart



Introduction

On occasion, disposal of a specific waste in landfills is called into question. Determining whether an exception to standard disposal practices is warranted is a complex question and one the Advisory Committee of the Determination Procedure for Solid Waste Disposal Bans has been meeting over the last five months to address. The result of their efforts, contained in this document, is a well-defined process for addressing whether a specific solid waste should be disposed of in a landfill or be managed in another fashion.

Many times when the means in which a certain solid waste is being managed is called into question, the question being posed is, “should it be banned from landfills?” While this is how the issue arrives at the Department of Natural Resources (DNR), this is not the actual question that needs to be answered. As professionals in solid waste management, the members of the Advisory Committee want to make the point that all solid waste must go somewhere; a landfill ban only redirects the ultimate destination of the waste. In that regard, the real underlying question is, “how should we manage this solid waste?” So when reviewing the procedure, keep in mind that this latter question is the focus.

Prior to development of this procedure, there was no prescribed means for establishing the best course of action for Iowa. While divergent opinions and positions will always be part of any public discussion, this Determination Procedure is designed to set forth standard guidance from which the Department of Natural Resources might make a recommendation. This recommendation would come after considering consistent elements and all possible alternatives to a statewide solid waste disposal ban in Iowa.

While every type of waste has its own characteristics, which make it unique and must be considered in the final analysis, the Advisory Committee has standardized the approach used to reach the decision. The procedure establishes a framework for decision-making through the determination process. It defines decision points, responsible parties, and elements that must be considered in any determination.

The determination procedure establishes a transparent process, consistent with the core responsibilities of the Department of Natural Resources. Stakeholders and the general public will become aware of the depth of research and consideration required to reach a recommendation regarding banning a solid waste from landfills. The procedure also allows participation in the process by stakeholders and the general public.

This procedure does not assume that a ban is a desirable or an undesirable outcome. If the procedure results in a final determination that recommends a ban, then it is assumed the

recommendation will move into the legislative or administrative rules process for the State of Iowa.

This procedure is the product of a five-month deliberative process created and sponsored by the Energy and Waste Management Bureau of DNR that involved representatives of key stakeholder groups. The project was funded by the Solid Waste Alternatives Program (SWAP). More on the process and the role of the working group can be found on page 16 of this document.

Rationale

At the beginning of 2003 there were no new total bans of materials from landfills in Iowa that were statewide. Some materials, notably whole tires and lead-acid batteries, have long been subject to a ban on disposal across the state. Certain local jurisdictions in the state have implemented bans of specified materials from their landfills, sometimes after varied procedures to determine the need, alternatives, and impact. Neighboring states may or may not have implemented statewide bans on certain materials. These bans have mixed reviews regarding their success. Typically, the process through which decisions were reached on these bans was created as the process unfolded.

One thing is certain: no state or local jurisdiction has developed deliberative guidance for a solid waste disposal ban determination. Only one association has given the issue the attention required to develop a position. The Solid Waste Association of North America (SWANA) and its Iowa Chapter, Iowa Society of Solid Waste Operators (ISOSWO), have developed a recommended procedure that is in keeping with the priorities of their membership. This became the starting point for the Advisory Committee's deliberative process.

There is a need for a determination process that fits for Iowa. The changing conditions and emerging issues of solid waste disposal may require the consideration of landfill bans for some items. Electronics, such as cathode ray tubes (CRTs), and used oil filters are the subject of action in other states. Still, those states have reached their decisions without applying a formalized procedure to forecast the impact of these bans.

In looking to the future, the rationale for banning any material should address one of three major concerns. These concerns are ordered by importance according to the committee, and reflect the same order of importance reflected in a survey of registered voters.

1. **Environmental.** Impact on human health and the environment. An example of this would be the negative environmental and health effects of lead compounds and acid which resulted in the state landfill ban on lead-acid batteries.
2. **Management.** Difficulty of managing material at a landfill or operational problems, including worker health and safety caused by disposing of the material at a landfill. An example of this would be the state landfill ban on the disposal of whole tires because they "float" to the surface of a landfill after being buried.
3. **Volume.** Significant disposal air-space savings could be achieved by banning the material from disposal. An example of this would be the state landfill ban on yard waste, which in 1991 was estimated to make up 12-14% of landfilled waste.

The Iowa DNR is not currently seeking to implement landfill bans of any material. However, the Department is constantly seeking to improve solid waste management, and therefore has developed this process for determining if and how waste should be banned from landfills statewide. By working with stakeholders through the complexities of the array of considerations in advance, the procedure will contribute to a fair and timely determination should one be requested.

Premises

In developing the Determination Procedure, the stakeholder working group upheld certain premises that emphasize the importance and value of balanced considerations. The premises emerging from their deliberations frame the approach to decision-making and guide DNR in its procedural activities.

Fair Consideration – The systemic review of feasibility and impacts will, as much as possible, ensure a balance in the information reviewed. It will include perspectives of the array of stakeholders. It will look at impacts on residents, business, government, and the environment of the waste stream and Iowa's culture. To this end, the Advisory Panel conducting each review will be carefully selected to ensure a representative balance.

Information-based – Data, experience, and other relevant information will serve as the driving force in the review of feasibility and impacts. To ensure the necessary quality of information, a multi-disciplinary approach should be used to collect and analyze the data presented to the Determination Panel for review. Expert witnesses should be utilized as needed. The recommendations arising from the review are expected to be backed with supporting information.

Real-world focused – The decisions ultimately must be applicable within the context of Iowa's environment, culture, economy, and government. The Determination Procedure acknowledges it is not always possible to exactly forecast the future of the state, but best efforts should be made by the Advisory Panel and DNR in all considerations related to implementing the decisions.

Democratic Access – Requests for determination using the prescribed request procedures should allow democratic access for Iowans.

Procedure

Request for Determination Submitted

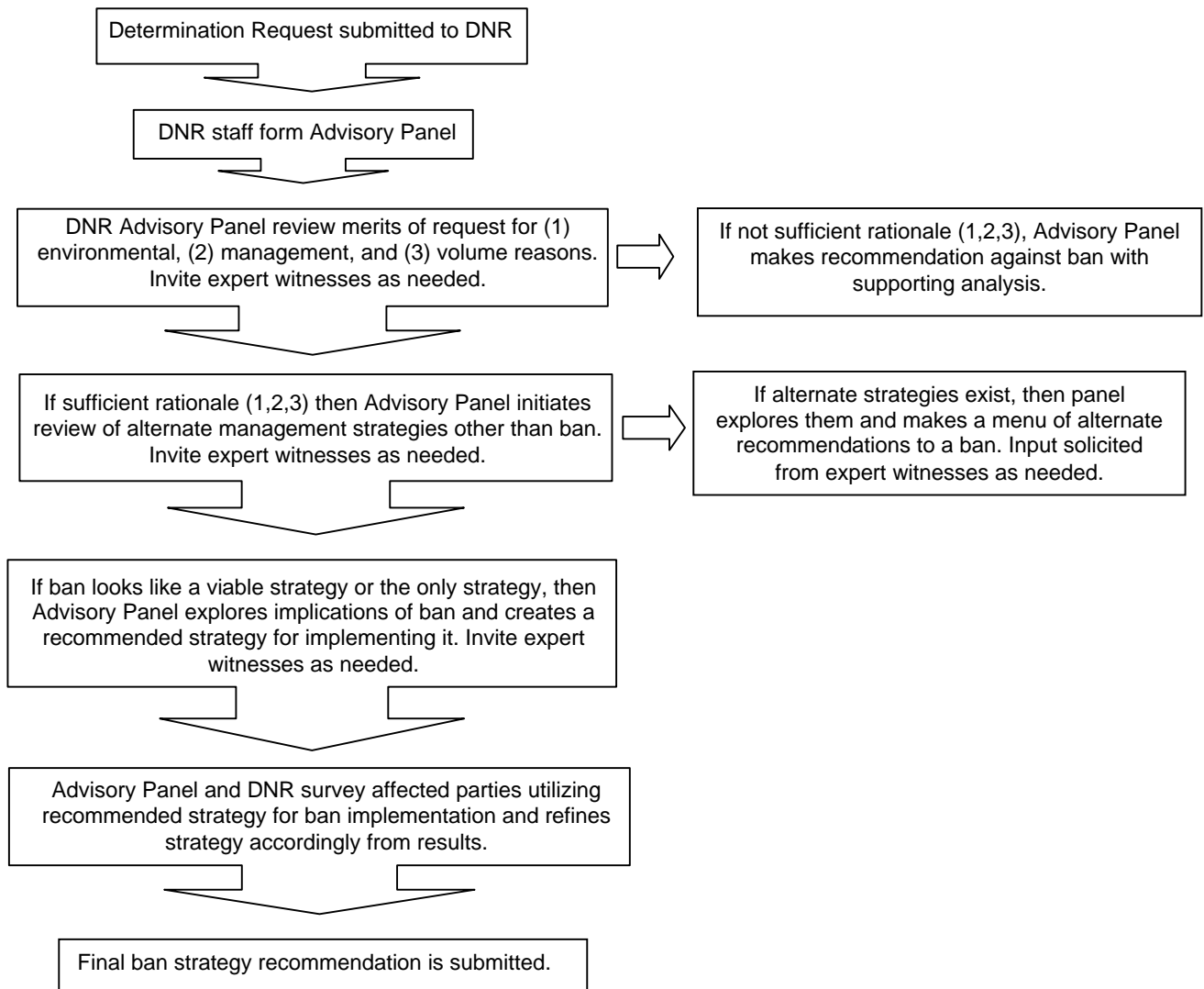
- Eligible Applicants:
The Governor, a legislative committee, and the DNR Director are eligible to initiate the Request for Determination Procedure.
- Relevant Information
The DNR and advisory panel will be greatly aided if the following information is submitted:
 - Include background information about the driving constituency.
 - Include information about what specific material is being requested to be banned from landfills.
 - Include a rationale explaining why the material should be banned from landfills. This rationale will include whether the material causes environmental, management, or volume concerns.
 - Include the applicant's analysis of how a ban might be implemented and its potential impacts, which may include economic, environmental, management, volume, and market impacts.
 - Include the applicant's assessment of the impacts of taking no action.

Systemic Review of Feasibility and Impacts by Advisory Panel

- The DNR Director will initiate the Systemic Review.
 - The DNR Director will direct staff to form a representative advisory panel and initiate the review.
- It will be the responsibility of the Advisory Panel to examine the feasibility and impacts of a material ban and present their recommendations to the DNR Director for the department's final recommendation.
- The designated staff in the Energy and Waste Management Bureau will serve as the coordinator/manager of the Systemic Review and lead the Advisory Panel.
- The Advisory Panel will be constructed by DNR staff and consist of a sufficient number of people to form a representative body of affected stakeholders. It is suggested that the advisory panel be no greater than 15 people. Suggested representatives are:

- o Generators
- o Producers (manufacturers)
- o Haulers
- o Solid waste disposal operators
- o Processors
- o Distributors
- o Government agencies, state, and local
- o Regulatory agencies
- o Citizens

Procedure Flow Chart



Issues to Address when Proceeding through the Flow Chart

The following tasks represent the potential list of subject areas to be addressed when evaluating a waste management methodology for the material in question. The tasks listed may need to be modified based on the specific material being evaluated.

- Definition of the material(s) the proposed ban will cover.
- Define the current situation statewide for the proposed banned material.
 - o Determine how much is produced annually in Iowa.
 - o Determine whether the amount is increasing, staying the same, or decreasing, analyzing trends and projections.
 - o Determine whether the material is found across the state in proportion to the population and/or geography.
 - o Determine how bordering states handle the proposed banned material.
 - Identify potential for impact of displacement of materials across borders.
 - Determine impacts of other states' bans on this material, if any.
 - o Determine who generates the material.
 - o Determine how material is currently handled.

Definition of the material(s) the proposed ban will cover.

- o Define the current situation statewide for the proposed banned material.
 - Determine how much is produced annually in Iowa.
 - Determine whether the amount is increasing, staying the same, or decreasing, analyzing trends and projections.
 - Determine whether the material is found across the state in proportion to the population and/or geography.
 - Determine how bordering states handle the proposed banned material.
 - o Identify potential for impact of displacement of materials across borders.
 - o Determine impacts of other states' bans on this material, if any.
 - Determine who generates the material.
 - Determine how material is currently handled.
 - o Source Separation
 - o Collection
 - o Transportation
 - o Landfill
 - o Other
 - Determine what currently happens to the material.
 - o Recycle
 - o Disposal
 - o Trends

- Identify and solicit level of awareness from stakeholder groups of the problem and associated issues.
 - o Generators
 - o Haulers
 - o Solid waste disposal operators
 - o Interest groups
 - o General public
 - o Local governments
- Identify and solicit impact data and potential solutions or alternatives from key stakeholders, including but not limited to the following.
 - o Generators
 - o Producers (manufacturers)
 - o Haulers
 - o Solid waste disposal operators
 - o Processors
 - o Distributors
 - o Government agencies, state, and local
 - o Regulatory agencies
- Identify alternative management methods to handle reuse, recycling, or disposal of the material.
 - o Impact on the collection and transportation infrastructure of the material to a site for processing and reclamation in accordance with regulations or recognized standards.
 - o Availability of vendors to accept the material and process for reclamation and/or re-use and do so in accordance with environmentally sound practices.
 - o Determine existing and potential capacity to handle the estimated quantities of the proposed banned material. Determination of capacity should include the potential of new markets.
- Determine level of convenience including fees, distance, operating, and potential revenues associated with alternative management methods as a measure of potential compliance for various stakeholders.
 - o Generators, individual and business
 - o Producers
 - o Haulers
 - o Solid waste facility operators
 - o Processors
 - o Distributors
 - o General public, if applicable

- Identify need for education of generators regarding separating the material, properly arranging for collection, transporting, alternative management, and non-compliance penalty. If possible the annualized cost for educational outreach should be included.
- Identify need for education of other stakeholders.
- Determine DNR resources needed to ensure compliance by generators, haulers, landfills, and alternative management vendors.
- Determine authority and enforcement procedures.
- Determine infrastructure components required to separate, collect, store, and transport for processing the material.
- Determine potential market impacts.
 - o Determine options for new or expanded markets
 - o Determine expected impacts on the market due to change in quantity or type of materials or products in the market.
 - o Anticipate the future use and production of the material, e.g. whether manufacture will be discontinued.
 - o Determine useful life of original material and of recycled product.
- Determine how much of the infrastructure must be in place prior to implementing a ban.
 - o Determine how much of infrastructure anticipated to be needed is currently in place.
 - o Outline a plan for increasing infrastructure capacity, if needed.
- Determine impact on illegal dumping.
 - o With a ban
 - o With no action
 - o With an alternative management method
- Determine impact of a management strategy or ban in terms of reduced, increased, or level costs for stakeholders over the short and long term.
 - o General public, individuals and businesses
 - o Manufacturers
 - o Generators
 - o Haulers
 - o Solid waste facility operators
 - o Recyclers
 - o Alternative management vendors
 - o DNR
 - o Local government
- Determine the impact of no action in terms of reduced, increased, or level costs for stakeholders over the short and long term.

- o General public, individuals and businesses
 - o Manufacturers
 - o Generators
 - o Haulers
 - o Solid waste facility operators
 - o Recyclers
 - o Alternative management vendors
 - o DNR
 - o Local government
- If possible, quantify environmental impacts of no action and environmental impacts of utilizing an alternative management method or banning the material.
- If possible, quantify the health impacts of no action and health impacts of utilizing an alternative management method or banning the material.
- If possible, quantify management impacts of no action and management impacts of utilizing an alternative management method or banning the material.
- If possible, quantify volume impacts of no action and volume impacts of utilizing an alternative management method or banning the material.
- Identify and determine a most likely option to manage the proposed material based on the data and information gathered in this procedure to be weighed in deliberation against the option of taking no action on the material.
 - o Determine percentage of compliance achievable.
 - o Identify handling of the material.
 - o Determine a ban implementation schedule.
 - o Determine the schedule for periodic evaluation of the management method to consider the following.
 - Effectiveness
 - Diversion rate
 - Compliance
 - Cost
 - Change in the product/material
 - Market consequences
 - Intended impacts
 - Unintended impacts

Public Input

- Public testimony and input will be sought by the Advisory Panel prior to developing its recommendation.
 - o The Advisory Panel will establish a time frame for public input.
 - o The Advisory Panel will publish notice of the proposed material ban and solicit comment in a structured manner.
 - o Public input will be in the form of written or electronic communication.
 - o The Advisory Panel will consider public input in its deliberations in balance with the remaining elements of the Panel's review.
- The Advisory Panel or DNR may survey affected parties utilizing the recommended strategy for ban implementation and refine strategy accordingly from the results

Recommendation and Report to DNR Director by Advisory Panel

- A report to the DNR Director will be prepared by the DNR and reviewed by the Advisory Panel before submission to the Director.
 - o The report will state the Panel's recommendation in a summary statement at the beginning of the document.
 - o The report will include the rationale for the recommendation, including supporting data and information obtained in the Systemic Review of Feasibility and Impacts.
 - o If feasible the final report will include the collection of public input documents.
 - o If requested, the Panel will develop a presentation to the Director of DNR and be prepared to respond to questions.

Final Determination Recommendation by DNR

- DNR will issue the Final Determination Recommendation.
 - o The recommendation will be communicated to the Governor's office or the committee submitting the Request for Determination.
 - o The decision will be available to the public.

Process and Advisory Committee

This Determination Procedure for Solid Waste Disposal Bans was developed in a five-month process that integrated an array of stakeholders in the deliberations. The Procedure was the product and result of a cumulative process to research and analyze government and non-government policies and procedures on landfill bans, stakeholder feedback, and testing the proposed procedure's effectiveness through a statewide survey that applied the Procedure to a hypothetical ban of used oil filters.

A transparent and participative process was fundamental in ensuring all perspectives and interests were considered in developing the procedure drafts. Key stakeholders were consulted and briefed on the process. Most important, an Advisory Committee of twenty stakeholders representing the array of public, private, and nonprofit entities provided ongoing guidance and input into the content of the Procedure. Their insights added value to the document and their discussion of differing priorities and interests ensured a fair and comprehensive Procedure emerged. The Advisory Committee met five times and conscientiously completed review and comment between meetings.

Advisory Committee to Develop a Determination Procedure for Solid Waste Disposal Bans

- Sara Bixby, Foth & Van Dyke, Representing ISOSWO, Des Moines
- Dawn Carlson, Petroleum Marketers & Convenience Stores of Iowa, West Des Moines
- Konni Cawiezell, Iowa League of Cities, Des Moines
- Dave Cretors, Iowa Department of Economic Development, Des Moines
- Marie DeVries, East Central Iowa Council of Governments, Cedar Rapids
- Mike Fairchild, Metro Waste Authority, Mitchellville
- Leslie Goldsmith, Prairie Solid Waste Agency, Creston
- Brent Hazelett, Filter Manufacturers Council, Research Triangle Park, NC
- George Hennessey, Absolute Disposal, Cedar Rapids
- Curtis Hill, Waste Management, Des Moines
- Elizabeth Horton-Plasket, Iowa Environmental Council, Des Moines
- Ellsworth Jeppeson, BV Recycling Center, Storm Lake
- Dewayne Johnson, Iowa Recycling Association, Des Moines
- Fred Kesten, Iowa Waste Exchange, Region XII Council of Government, Carroll
- Bob Mulqueen, Iowa Association of Counties, Des Moines

- Jeff Myrom, DNR Waste Management Bureau, Des Moines
- Andy Ockenfels, City Carton Recycling, Iowa City
- Dan Stipe, DNR Field Office 4, Atlantic
- Clay Swanson, DNR Field Office 2, Mason City
- Bob Walters, Iowa Gold Distributing, Central City

Development of the Determination Procedure was conducted by State Public Policy Group, Des Moines, Iowa, under contract with the Iowa Department of Natural Resources. The project was funded by the Solid Waste Alternative Program (SWAP).

Appendix 1:

SWANA Policy on Solid Waste Disposal Bans

T-32

SWANA TECHNICAL POLICY POSITION

SWANA Policy on Solid Waste Disposal Bans

I. BACKGROUND

Some units of government have implemented bans or otherwise restricted specific products, materials or a classification of a particular waste component from disposal in a solid waste disposal facility. Some of the items that have been banned include computers and electronic products, cathode ray tubes, tires, lead-acid batteries, landscape waste, motor oil, products containing metal, mercury, newspapers, beverage containers and other materials.

Solid waste disposal facilities are governed by laws, rules, regulations and standards whose goal is to ensure human health and environmental protection. These facilities, when properly designed and operated, can safely dispose of municipal solid waste. Disposal bans/restrictions are instituted, however, for a variety of reasons or needs which include the enhancement of waste diversion goals, or in response to a perceived risk to human health and environment.

It is SWANA's position that the implementation of a disposal ban or restriction should only be implemented when there is a legitimate need and when the product or waste component in question can alternatively be managed in a reasonable manner. In making this assessment, policy makers need to recognize that the integrated municipal solid waste system is a system made up of several elements including collection, diversion and disposal. Each of these elements must participate in the waste ban/restriction process.

Prior to implementing a disposal ban or restriction, the infrastructure must be in place to regulate, collect, store, transport, re-use, recycle or re-manufacture the banned or restricted material. A source of funding to implement alternative management must be identified and must not place an unfunded mandate on either the government and/or the owner(s) of the integrated solid waste system.

II. PURPOSE

The purpose of the policy on Solid Waste Disposal Bans is to establish guiding principles for SWANA and its members to use, in collaboration with legislators, interest groups, regulatory agencies and others, who have an interest in the management of the integrated solid waste system, when considering or developing a waste restriction/disposal ban.

III. ISSUES TO BE ADDRESSED IN IMPLEMENTING A SOLID WASTE DISPOSAL RESTRICTION OR BAN

Prior to the implementation of a disposal ban or restriction, policy makers must clearly evaluate the proposal's rationale and all impacts to public health, the environment and cost. Policy makers must avoid placing unfunded mandates on local governments or the owners of solid waste disposal systems by implementing a waste ban and requiring the local governments to determine and provide the infrastructure. Policy makers should:

1. Identify the material to be banned/restricted, and explain why.
2. Consult with government, regulatory agencies, distributors, producers, generators, and representatives for the integrated solid waste system concerning its impacts, including effects on other jurisdictions.
3. Identify and quantify the potential impacts on the environment and human health of continuing to dispose of the product or material in existing disposal facilities
4. Identify alternative management methods to handle the reuse, recycling or disposal of the proposed restricted or banned product or material including:
 - Availability of vendors to accept the materials and process for reclamation and re-use and in accordance with environmentally sound practices
 - Demonstrated capacity to handle the estimated quantities of the banned/restricted material
 - Infrastructure components required to separate the banned/restricted material, collect, store, and transport to sites for processing
 - Ability to put infrastructure components in place prior to the initiation of the material ban/restriction
 - Impact on the collection and transportation of the material to a site for processing and reclamation in accordance with regulations or recognized international standards
5. Determine the costs and how to distribute it for processing the restricted or banned material, and enforcing the ban.
6. Establish a mechanism to fund the alternative system requirements and to fairly allocate these costs to producers, distributors, retailers, consumers and solid waste managers.
7. Establish a mechanism to periodically review disposal bans or restrictions.
8. Establish a mechanism to temporarily set aside the restrictions or ban in order to alleviate an economic, public health or environmental emergency, created by an unforeseen situation.

CERTIFIED to be correct and complete statement
of the matters duly approved by the Executive
Committee on October 14, 2001.



Allen Lynch, International Secretary
Dated October 14, 2001

Appendix 2:
Preliminary Test
- Survey of Four Populations

Preliminary Test

Survey of Four Populations

**Advisory
Committee**

Determination
Procedure for
Solid Waste
Disposal Bans

February 2003

Conducted for the Iowa Department of Natural Resources
by State Public Policy Group, Inc.

Introduction to Survey Results

The remainder of this document contains the slides and frequency reports presented to the Advisory Committee at the February 21st meeting. The presentation was of the results from the four populations surveyed – voters, service station / quick lubes, haulers, and landfills – in the preliminary test of what at that time the Draft Ban Procedure. The surveys were intended as a dry run to test whether the procedure questions developed could be answered as a means to determine the need for and the ability to implement a statewide landfill ban.

Overall, the surveys worked well in helping to refine the draft procedure and gain perspective on a ban's complexity and impact. Most of the information, which the advisory committee established, was necessary in the draft determination procedure was collected or approximated using the surveys. However, it became evident that the information gained through survey research would not be specific enough to make the ultimate determination about any ban and that the draft procedure was not adequate to make a determination. Clearly what would be needed would be a multidisciplinary approach that was flexible and provided for multiple outcomes based in the material being evaluated.

Ultimately, the real value of the survey research was as a tool to lead the committee's discussion. The findings helped spark an exchange among members to thoughtfully reexamine the nuances of the process itself. It is this discussion that reshaped the Ban Procedure into the Evaluation Process for Solid Waste Management contained in this report.

Table of Contents

Survey Summary	23
Survey Highlight	23
Survey Presentation	27
Registered Voter Frequency Report	39
Appendix A – Registered Voters' Verbatims	46
Landfills Frequency Report	54
Appendix B – Landfill Verbatims	62
Service Station Frequency Report	68
Appendix C – Service Station Verbatims	76
Haulers Frequency Report	82

Survey Summary

The Iowa Department of Natural Resources contracted with State Public Policy Group (SPPG) to develop a procedure to evaluate whether a ban of a specific material from landfills statewide should be implemented. SPPG set about the task by assembling a panel of experts from all sectors of the Solid Waste Industry – haulers, landfill operators, commercial generators, and household level generators. The committee drafted a procedure as to what would warrant a ban and how it would be proposed, what would be considered in deciding whether to institute a ban, and how the decision-making process would work.

To see if the draft procedure developed would work, a survey was used as a case study to see if all of the considerations could be addressed; in this instance a landfill ban on used oil filters was chosen¹. Four surveys were conducted to collect information and give additional insight into some of the considerations the procedure must address in determining whether a ban be instituted. Overall, the required information could be collected on most of the considerations the procedure wanted to include in the discussion. Areas that were difficult to collect – those considered proprietary – were expected to be so. The surveys also identified an ideological difference in reasons for a ban – environmental, volume, or management – between the committee and the survey populations.

Self-administered mail surveys were sent out to four populations the week of January 13 – 17, 2003. The populations were a sample of registered voters randomly selected from across the state, all permitted landfills in the state, commercial generators of used oil filters (all the service stations that are member of the Petroleum Marketers & Convenience Stores of Iowa and quick lube stores listed in major metropolitan areas), and haulers (compiled from lists compiled by cooperating landfills). Only the voter and landfill surveys were probability samples; so only they can be inferred to represent the population of which they are a part, within a certain margin of error. The result of the other two surveys cannot be assumed to represent the population of which they are a part, but they provide useful information where none exists.

Survey Highlight

Only ¼ of the public or registered voters actually deals with used oil filter themselves. The vast majority of filters are dealt with by businesses that perform oil changes as a service.

- Currently over ¾ of the service stations and quick lube shops say they either drain or puncture and drain used oil filters.

¹ According to IDNR, currently, no new statewide bans of any material from landfills is being considered. However, DNR has had inquiries over the years, so to be proactive, the department is developing a procedure to evaluate whether a specific material can be banned.

All four populations realize that used oil filters have the potential to be harmful and cause environmental degradation:

- The majority of voters, landfill operators, and service stations realize throwing away oil filters in the landfill may be convenient, but may also have negative consequences.
- Only haulers did **not** have a majority of respondents who felt this way. They also have the largest percentage that believes throwing used filters in the landfill does not create a problem for anyone. (They barely edge out service stations and quick lubes to be the stakeholder group that most widely holds this opinion.)

Implementing a ban will require more infrastructure to carry it out, and more infrastructure costs more money.

- Service stations and quick lubes indicate they have the space to store used filters (65%), but only a little over 1/3 (34%) say they have the short-run financing to subsidize the alternate collection required for the ban until their startup costs can be recovered.
- Most haulers would need to expand to handle a ban. A certain proportion of haulers need more of each major infrastructure component used in their business to expand enough to handle the additional work the ban will require: 28% would need more vehicles, 38% would need more dumpsters, and 8% would need more personnel.
- Landfills are not very interested in getting into the oil recycling business and expanding capacity to reprocess.
 - A clear majority, 57%, were “not at all” interested
 - Only 6% were “very” interested

Money matters to everyone. This is no great revelation, but poignant nonetheless.

- Voters do not like a \$2 increase in their total bill (33% could not live with), but it would not be a great burden on their household budgets (16% said not much or practically none).
- Service stations and quick lubes could not live with a \$5 total increase in overhead per oil change (66%).
 - Almost all, 92%, would pass any cost on to customers.
- Money doesn't really matter to haulers; what matter to them is convenience and extra work.
- Haulers were not enticed by the opportunity for extra business from picking up used oil filters from households; however, they were interested in business clients. More

than anything, as the open-ended responses point out, haulers would prefer no ban on oil filters. It just means more work for them.

A ban will affect business. Every link in the chain expects increased costs, and a majority of those who can pass it on will choose to do so.

- Apparently many service stations and quick lubes operate on a thin, margin and report that a small per unit increase could be devastating.
 - ANY increase in overhead would affect profitability noticeably for 64% of respondents.
 - The verbatim responses assert some businesses use oil change as a “lost leader” to attract larger, more expensive, jobs.
- Haulers were reluctant to offer this data: 46% did not answer questions about percentage costs they would expect to incur, if a ban were implemented. Those who did made it clear they believed the cost would be dramatic.

An oil filter ban will bring illegal dumping.

- Currently, most used oil filters are disposed of by vendors who follow relatively environmentally sound procedures.
- A ban would cause more individual households to hide them in their garbage or illegally dump them, in the opinion of all stakeholders. When asked what percent of average persons would dump them illegally, all voters together averaged a response of 40%. Solid waste professionals’ estimates of what percent of average Iowans would illegal dispose of filters were considerably higher.

Fines, whether at the landfill or for generators, seemed to be nobody’s favorite.

- A flat fine per ton when an oil filter is found is the preferred way to handle the problem at the landfill by both landfill operators (58%) and haulers (39%).
- The amounts of the fine suggested by different stakeholder groups are all over the board. What one stakeholder group suggests depends on which group is making the suggestion and who would be fined.
 - The average suggested by all landfills (50% of respondents selected \$20 or less) and voters (average \$42 per individual) is considerably less than haulers (50% said \$100 or less) and service stations (average \$87 per individual).

Education is a perceived and a real need, especially among voters.

- Every population polled realized voters would need a lot of education. Even over ¼ of voters said the average customer would need a great deal of reinforcement.
- Considering puncturing and draining the used oil filters was new information to 71% of voters, it is probably true they need more education.

Overall, the procedure worked well in helping to refine the draft procedure and gain a perspective on a ban's impact and complexities. Most of the information that the advisory committee determined was necessary to make a determination was collected or approximated using the surveys.

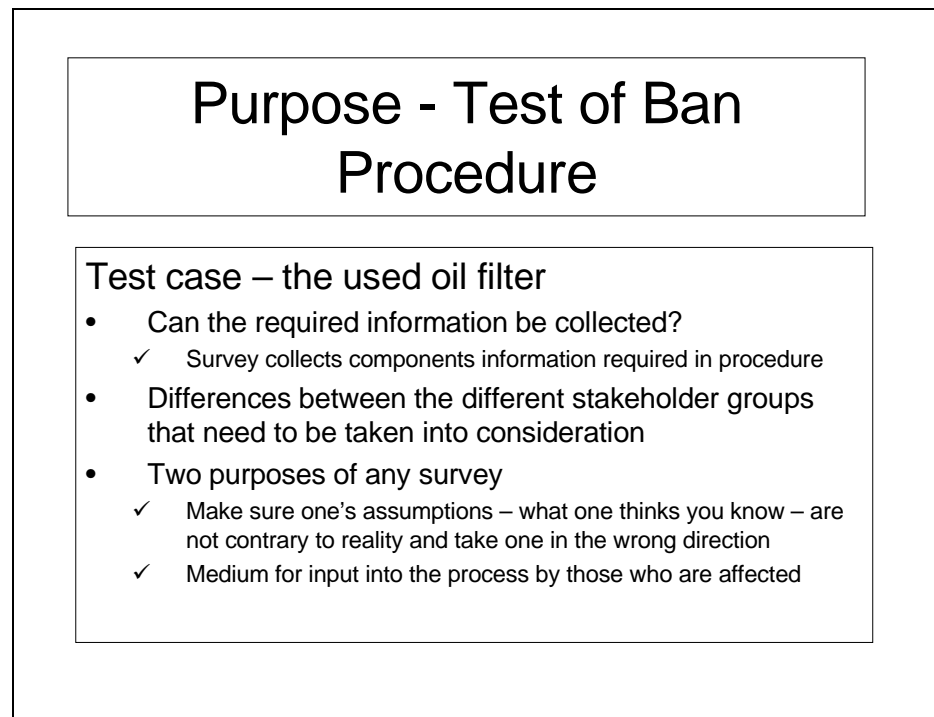
- Unfortunately, and as expected, proprietary information was hard to come by voluntarily.
- However, the information was not specific enough to reach a detailed conclusion about a specific ban.

Suvey Presentation

Slide 1



Slide 2



Methodology

4 mail surveys to 4 different groups:

1. Voters,
2. Service Stations / Quick Lubes,
3. Haulers, and
4. Landfills

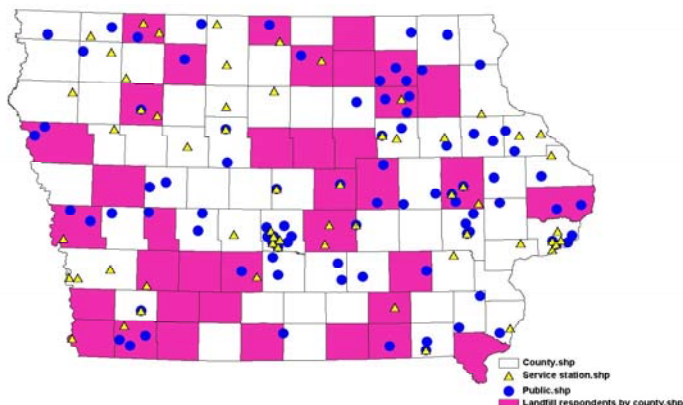
Questionnaire Design

- Some questions answered by all populations
- Other questions tailored to a population's unique circumstances in the solid waste disposal chain
- All questions designed to answer the three component pieces of the Real World Test

Methodology cont.

Multi-wave contact procedure

- Notification: January 3 - 7
- Survey: January 13 - 17
- Reminder : January 27 - 31
- Still trickle in – cutoff February 12



Methodology cont.

Population	Mailed	Returned	Response Rate	Probability Survey
Service stations/quick lubes	234	70	29.9%	No
Registered voters	571	124	21.7%	Yes
Landfills	59	33	55.9%	Yes
Haulers	41	13	31.7%	No

Scientific vs. non-scientific or probability vs. non probability
 Margin of error
 Frequency report in appendix

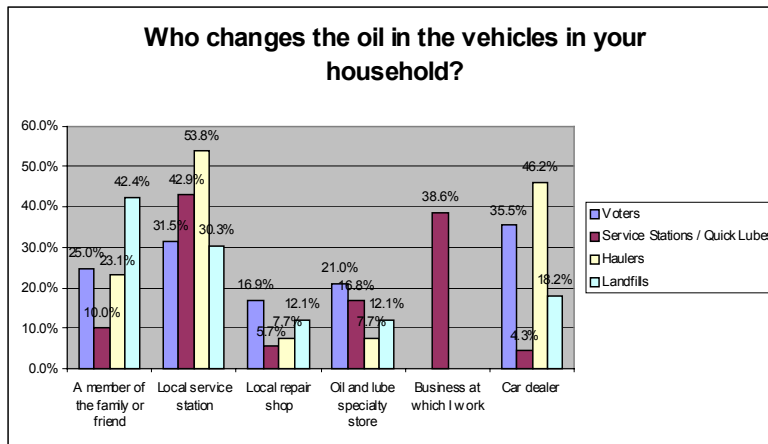


Procedure for Solid Waste Disposal Bans

Testing the Component Pieces

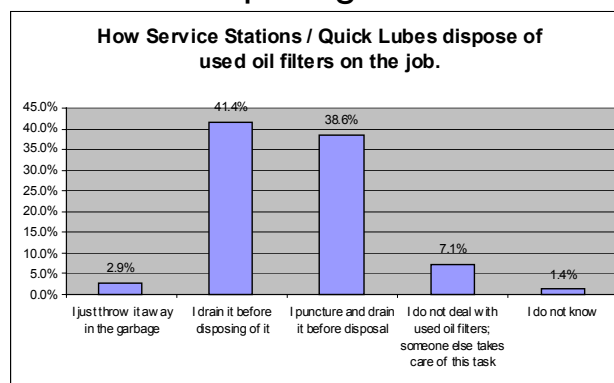
Determine how the material is generated and handled currently

How do you dispose of used oil filters....?

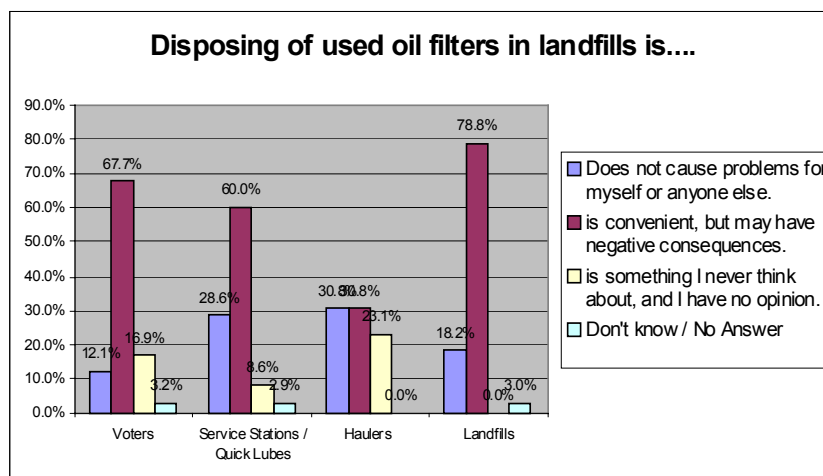


How Do Service Stations Dispose of Used Oil Filters?

Commercial oil lube providers currently dispose of used oil within accepted guidelines



Stakeholders Awareness of Problem



Can the market infrastructure handle a ban?

- Resource availability to implement ban for each:
 - Commercial oil change generators
 - Hauler
 - Landfill
- Preferred means for implementing ban

Is the infrastructure there?

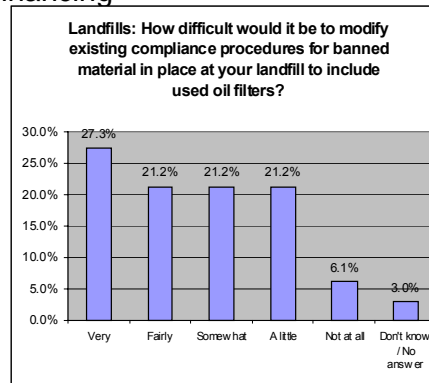
- **Service Stations and Quick Lubes**

- 65.7% have space for another dumpster
- Only 34.4% have short-run financing

- **Landfill adapting**

- **Haulers need more**

- 23.1% need more **vehicles**
- 38.7% need more **dumpsters**
- 7.7% need more **personnel**



Additional capacity

- Landfills are not very interested in getting into the oil filter recycling business


- 6% very - top
- 57% not at all - bottom

- More interest when the state ponies up

- If state provides financial incentive, 39.4% landfills would be more interested

Costs

- How much will the ban affect what one pays for an oil change?
 - Is the additional cost reasonable/bearable?
- How much will fee hurt business?
- How much of a financial incentive do businesses need to be enticed to provide service?



Environmental charge

- Public would not be thrilled with a \$2 charge per filter
 - Only 40.3% could live with it
 - However, $\frac{3}{4}$ admit the charge would have no practical or not much affect on their household budgets
- Service Stations
 - Only 14.3% could live with \$5 in extra overhead
 - 92% would pass any cost on to consumer
 - The service can currently be provided for \$1 per filter according to verbatims
- Haulers
 - The money isn't worth the hassle

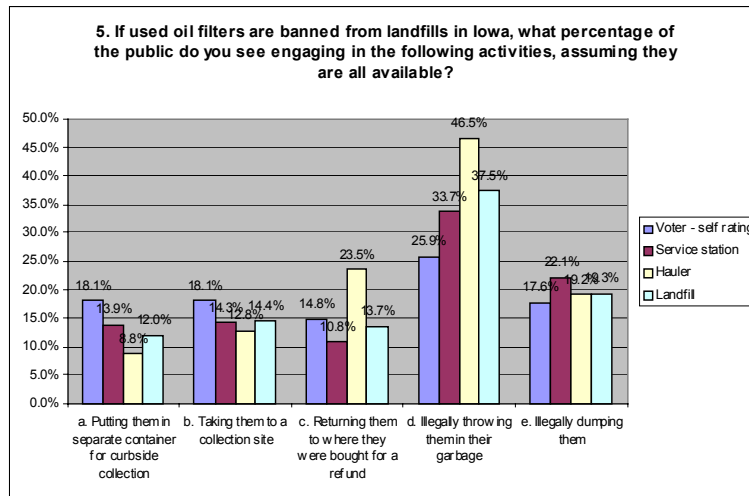
Affect business

- Service stations and quick lubes
 - The margin is apparently small per oil change
 - Any increase in overhead affect profitability
 - 61.4% Greatly
 - 24.3% Noticeably
 - Oil change as a “lost leader” to attract business away from small shops.
- Haulers reluctant to offer cost data
 - What they do offer confirms expectations

Dumping, Deterrence, and Rehabilitation

- Ban's effect on illegal dumping
- Fines for deterrence
- Generator education for long run compliance

Illegal dumping by John Q Public



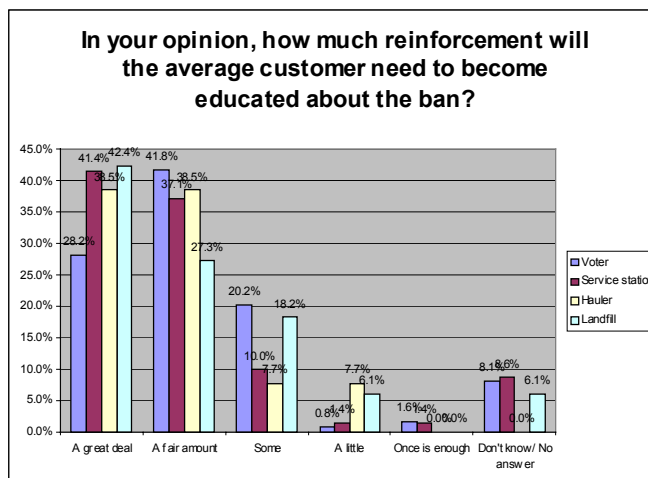
Impact illegal dumping

- Everyone believes service stations and quick lubes will have a greater level of compliance
- Fortunately most oil is changed by service stations and quick lubes – remember previous slide
- Believe it is the opinion of all populations that a ban will result in less ecologically sound behavior than is occurring now –
 - 1/3 to 2/3 depending on who's estimate of illegal dumping
 - Now most drained or punctured and drained

Fines

- Assessing the fine at the landfill
 - #1 Criterion: Flat fine for every ton
 - 57.6% Landfill
 - 38.5% Haulers
- Amount of fine
 - Individual generator:
 - Set their own punishment at \$42 per filter
 - Commercial generator: Anti whole proposition, but steep fines.
 - \$87 individual
 - \$190 business
 - Landfill: commercial generator: ½ responses \$25 or less per filter
 - Haulers punish with \$100 and \$500 respectively

Education



Procedure for Solid Waste Disposal Bans

How Real World Ready is the Procedure?

Evaluating the Procedure

- How well did the procedure work in reality?
- Overall, the approach was a valuable learning experience,
 - It collected information on the specified areas so a more informed decision could be made
 - Limitation in collecting some information
- The reason most widely accepted for a ban would be *environmental*, which includes *public health*

Changes to Procedure?

- Should the reasons for having a ban be changed?
- How are we going to get proprietary information?
- Small sample but tough to get proprietary information
- Spend more \$ to develop sample frame and mode



Determination Procedure for Solid Waste Disposal Bans

Preliminary Test
Survey of Four Populations

Determination
Procedure for
Solid Waste
Disposal Bans

Registered Voter Frequency Report

This survey is to help the Iowa Department of Natural Resources (DNR) develop a procedure for banning specific waste materials from landfills. Currently, **NO** new statewide bans of any material from landfills is being considered. However, DNR has had inquiries over the years, so to be proactive the department is developing a procedure to evaluate whether a specific material can be banned.

This survey is to help test and refine the procedure; so, consider the questionnaire a dry run or mock test. Several different groups are receiving the survey as part of the test: haulers, landfill operators, service stations, and registered voters. Just because the material we will talk about, oil filters, is not under consideration for being banned, do not under-rate the importance of this survey. *Your answers will help shape state policy.*

All of your responses to the questions will be confidential (under no circumstances will individual responses be released), so please do not hesitate to freely express yourself. Please answer all the questions. During pretesting the survey has taken 10 minutes. If you wish to comment on any questions or qualify your answers, please feel free to use the space in the margins or on the back cover. Your comments will be read and taken into account.

Thank you for your help and commitment to making Iowa a better place.

Section I. Your experience with oil filters

1. How do you dispose of used oil filters at home and on the job? [Indicate the appropriate box(s) for each location.]

At home %	On the job%	Response category
45.2%	29%	Whoever changes my oil disposes of it
7.3%	0.8%	I just throw it away in the garbage
18.5%	2.4%	I drain it before disposing of it
5.6%	1.6%	I puncture and drain it before disposal
23.4%	18.5%	I do not deal with used oil filters; someone else takes care of the vehicle's maintenance
0%	2.4%	I do not have a vehicle
0%	1.6%	I do not know

2. The number of times a car has its oil changed in a year varies depending on a number of things, one being use. Cumulatively, for all the vehicles in your household, how many oil changes were performed in the last year? Average = 6.9 times; range is 0 to 30 times

3. Who changes the oil in the vehicles in your household? (Check all that apply)

Percentage	Response category
25%	A member of the family or friend
31.5%	Local service station
16.9%	Local repair shop
21%	Oil and lube specialty store
35.5%	Car dealer
0%	I don't know

Section II. Testing the Procedure

4. Following are three rationales for instituting a landfill ban. For each possible rationale, please tell us how reasonable you believe that reason would be for instituting a ban by marking the appropriate box.

	Very	Somewhat	Not reasonable	Don't Know/ No Answer
<u>Environmental</u> : impact on human health and the environment.	59.7%	26.6%	9.7%	4%
<u>Management</u> : difficulty of managing material at a landfill or operational problems, including worker health and safety.	29.8%	46.8%	15.3%	8.1%
<u>Volume</u> : significant disposal air-space savings could be achieved by banning the material from disposal.	24.2%	42.7%	24.2%	8.9%

5. From the following available alternatives choose the one that in your opinion best completes the sentence.

Disposing of used oil filters in landfills:

- 12.1% Does not cause problems for myself or anyone else.
- 67.7% Is convenient, but it may have negative consequences.
- 16.9% Is something I never think about, and I have no opinion on it.
- 3.2% Don't know/No answer

6. If used oil filters are banned, which of the following methods would you support for collection? (Select all those with which you agree)

- 17.7% a. Curbside pick-up in a separate container for an additional fee
- 23.4% b. Returning used filters to where you bought them for a fee less than curbside
- 75% c. Returning to a collection site at no extra charge to you

[Follow-up for those who selected c.] In miles, approximately how far would you be willing to drive to that collection site? Average = 7.6 miles; Range is 0 to 50 miles

Between the three options listed above, which would be your preferred disposal method? (Write the letter next to the option (a, b, c) in the space provided.) _____

Percent	Response category
7.3%	a. Curbside pick-up in a separate container for an additional fee
11.3%	b. Returning used filters to where you bought them for a fee less than curbside
72.6%	c. Returning to a collection site at no extra charge to you
8.9%	Don't know/No answer

Granted, you cannot possibly know whether anyone other than yourself would comply with a landfill ban prohibiting used oil filters. So what we are asking you in the next two questions is to share your perception of what might happen.

7. If used oil filters are banned from landfills in Iowa, what percentage of the public do you see engaging in the following activities, assuming they are all available?

Respondents' average percent	
18.1%	a. Putting in separate container for curbside collection
18.1%	b. Taking to a collection site
14.8%	c. Returning to where they bought for refund
25.9%	d. Illegally throwing them in their garbage
17.6%	e. Illegally dumping them

8. If used oil filters are banned from landfills in Iowa, what percentage of businesses that accumulate used oil filters as part of doing business, like service stations and while-you-wait oil change shops, do you see engaging in the following activities, assuming they are all available?

Your percent	
42.6%	Having a separate dumpster for collections
32.8%	Storing the used filters, then returning them in bulk
9%	Illegally throwing them in their garbage
8.5%	Illegally dumping them

9. You see a different side of the world than most state regulators. From your vantage point, how hard will it be for the Department of Natural Resources to assure compliance?

31.5% Very
 31.5% Fairly
 20.2% Somewhat
 4.8% A little
 2.4% Not at all
 9.7% Don't know/No answer

10. Chances are that if there is a ban on used oil filters, compliance will never reach 100%, but it will hopefully approach it. In months, how long do you think it will take the public to reach the maximum level of compliance? Average 16.4 months (5% trimmed mean)
11. If oil filters are banned from landfills, something must be done with them. Usually their contents are separated and the scrap metal is sold. If there isn't enough infrastructure - reprocessors, dumpsters for businesses, collection for residents, etc. - to handle the additional oil filters, what should be done?
- 4.8% Nothing. In the long-run the market will correct itself and provide capacity
 - 16.9% State government will need to provide grants and loans to spark development
 - 42.7% Used oil filters should not be banned unless there are other means in place that are acceptable to dispose of them.
 - 25% I do not know
 - 10.5% No answer

Section III. Cost

12. If evidence were presented that a ban was warranted, would a nominal fee of \$2 dollars per filter be something you could live with?
- 40.3% Yes
 - 33.1% No
 - 17.7% I'm not sure
 - 8.9% No answer
13. How much would an increase of \$2 extra dollars per oil change affect your household budget?
- 4% Greatly
 - 12.1% Noticeably
 - 43.5% Not much
 - 30.6% Practically none
 - 9.7% Don't know/No answer
14. Assuming that banning used oil filters from landfills statewide would increase the cost of an oil change, would a statewide ban affect how often you get your oil changed? Would you get your oil changed:
- 0% More often
 - .8% A little more often
 - 81.5% The same
 - 3.2% A little less often
 - 6.5% Less often
 - 8.1% Don't know/No answer
15. Used oil filters are small and hard to spot in your weekly garbage pick-up, so it is likely that if you threw one away during a ban, no one would know. Realizing that, how big of a fine, in dollars, would it take to stop you from throwing away a used oil filter in the garbage? Average =\$42.69 (5% trimmed mean)

46.8% I would never break the law, regardless of whether there was not a punishment

Section IV. Public Outreach

16. Currently, to properly dispose of a used oil filter it should be hot drained and punctured before throwing it away. That simply means the top of the filter must be drained near operating temperature and above room temperature for a length of 12 hours and be punctured so more oil may drain out of the filter.

71% This is new information to me

20.2% I was previously aware of this information

8.9% Don't know/No answer

17. Think back to the last time there was a change in garbage collections, how did you find out about the change? (check all that apply)

12.9% Notice on my garbage can or in my door about change in collection

55.6% Mailing from company or city

50.8% Newspaper

0.8% Internet

19.4% Radio

18. When you are not sure what the collection rules are, what do you do? (check all that apply)

4% Check the Internet

35.5% Call my city hall

50% Call the garbage collector

17.7% Other; *please specify: See Appendix A - Registered Voters' Verbatims*

19. In your opinion, how much reinforcement will the average person need to become educated about the ban?

28.2% A great deal

41.8% A fair amount

20.2% Some

0.8% A little

1.6% Once is enough

8.1% Don't know/No answer

Section V. Last Thoughts

20. Think back over the survey. We asked you about how you deal with used oil filters: the volume you create, how you dispose of them, how you would prefer to dispose of them, the level of education the public would need; and the cost to you. In your own words, are there any other issues the procedure needs to take into consideration to make sure the public is protected?

See Appendix A - Registered Voters' Verbatims

Section VI. Experience with Alternate Disposal

Now we need to ask you a few questions for the sake of comparison.

21. There are statewide bans that prohibit lead acid batteries, yard waste, and whole tires from being disposed of in landfills. Special measures have to be taken to deal with these types of waste. Sometimes these occur at the same location as the landfill. Besides these, are there any local landfill bans in your area that require you to dispose of waste using an alternative other than putting it in the can/sack with the rest of your garbage?

42.7% Yes
21.8% No
28.2% I don't know
7.2% No answer

For those who answered yes, what are the materials that cannot be disposed of in landfills in your area?

See Appendix A - Registered Voters' Verbatims

22. Do you participate in curbside recycling?

41.9% Yes, it's voluntary in my community
21% Yes, it's mandatory in my community
10.5% No
19.4% No, it's not an option where I live
7.3% Don't know / No answer

23. Do you recycle any goods that require you take them to a location to be turned-in?

24.2% No
70.2% Yes; what are they: See Appendix A - Registered Voters' Verbatims
5.6% Don't know/ No answer

24. For the purpose of making sure our sample is representative of the entire state, we would like your 5-digit zip code? See Appendix A for Map containing spatial distribution of respondents

Section VI. Other Demographics from Voter File

- D1. Gender

49.2% Female
50% Male
0.8% Don't know (removed tracking number)

- D2. Political Affiliation

30.6% Democrat
23.4% No Party
45.2% Republican
0.8% Don't know (removed tracking number)

D3. Age

Average = 57.4 years

Range = 23 to 90 years of age

*Thank you for taking the time to participate.
Your answers will help shape state policy.*

Appendix A - Registered Voters' Verbatims

18. When you are not sure what the collection rules are, what do you do? (check all that apply)

Other; please specify:

We have a private collector - we talk to him
We don't have a garbage hauler
Throw it in the trash
Read the booklet the city sends out
Read notice sent by collector
Newspaper and water bill insert
Let my garbage comply
I dump it
Don't worry about it
Do not have pick up service
City recycling publication
Check with manager
Check the letter we get yearly from the city - yes
Call waste management center
Call local recycler
Call landfill (2)
Call city transfer station
Ask a neighbor (4)

20. Think back over the survey. We asked you about how you deal with used oil filters: the volume you create, how you dispose of them, how you would prefer to dispose of them, the level of education the public would need; and the cost to you. In your own words, are there any other issues the procedure needs to take into consideration to make sure the public is protected?

Ample education and marketing of the benefits to future generations!
Aren't paper and plastic waste a bigger problem?
Aren't there more important things that you can do?
Because of the lack of frequency a person has to deal with an oil filter (as opposed to garbage which we deal with every day and most of us offer for collection once a week) I think educating the public about the importance of rules governing the disposal of filters is even more crucial. The information would need to be hammered into the public consciousness.
Burn them then dispose of them.
Education on how little oil it takes to pollute an aquifer. I think people should know the consequences. Usually once they know, they will comply.
Forget the oil filter ban. Oil will break down in the earth in landfills. Unless it gets into water tables it should cause no harm. It would be better to ban wood burning fireplaces in the city.
Garbage pickup should all be taking recycle material and not mix it with the garbage.

Have a collection site at least once a year for some of these. Such as tires, oil filters, toxic wastes, etc. People would probably prefer getting these things out of their garages over a period of a year rather than two or more years.

Have it done in a service station; maybe pay a little extra as they do with old tires.

I am aware money is not on hand to pay inspectors. There for we need to educate people about how fragile our planet is.

I am most worried about illegal dumping.

I don't have anything to do with oil filters as the service station takes care of them.

I feel that if landfills are placed in the proper areas, no ban is really needed.

I like the way batteries are taken back to the store and you get \$5.00 off your new battery. A landfill is close to our home and we use it regularly. Many people don't bother to pay; they just dump it out down a dead end road. 90% of population I think will follow normal rules and do what is right for our health with out a lot of government intervention, but a few make it so all these rules seem to be needed. I like less laws and a more informed public.

I live in a rural area. I would call the landfill if I wasn't certain of the rules. I take my own garbage to the landfill.

I live in the country and we have a lot of illegal dumping of garbage, appliances, etc. in the ditches. A ban on oil filters will increase the amount of dumping.

I take mine to where I worked at. They have a service that picks them up for recycling. An area of a local recycle site could have the same set up. My used oil is disposed of at the same site. They used it to heat the place. The problem with the general public is other fluids, gasoline, paint thinner, etc. are put in the same used oil container and that causes a problem.

I think manufacturers should bear the cost of proper disposal of their products. Build any fees required into the purchase price of the product. DNR must have adequate authority and funding to enforce a ban.

I think you should start with places that change oil first. They have the bulk amount to worry about! If that works, then go to the people at home.

I would like to see people stop dumping along roads and other places that are not the proper place to dispose of their belongings - furniture, refrigerators, old cars, etc.

If they were to go back to the dealer - make sure that they are adequately compensated - it's a dirty, filthy job - think about - would I do this job?

In my area the recycling center takes used oil. They should also have a place for used oil filters. This would be one of the best methods for recycling along with curb pickup. This has nothing to do with oil filters but the state should also consider a ban on compostable vegetable scraps from the landfill. People could institute backyard compost piles at no cost to themselves. Just think of the tons of space that could be saved by doing this.

Let the people know why it's important to know about oil filters! What's the effect?

Look at Iowa farm chemicals spread onto topsoil which drains into Iowa rivers and underground water sources. This is bad too!

More public awareness.

Ohhh! This isn't about protecting the public. You mean like the big radon gas scare and the asbestos scare and the lead-based paint scare and the big black mold scare, etc., etc. All of a sudden there is an oil filter scare? You people are exhausting.

Oil change service varies - this should be an automotive inclusion with service at no extra cost to the customer,

Put a price on throwing them away; find a company willing to market itself.

Put information on local news sites and on TV news.

Recycle system - first clean them, then recycle for reuse.

Take them back to where ever you bought them.

That about covers it.

The businesses offering oil changes should not be allowed to dramatically raise their prices; not more than necessary to cover disposal fees.

The entire automotive industry. Synthetic motor oils less harmful to the environment must be further developed and promoted. Alternate fuels must be explored. Dependence on automobiles and machines must be reduced. And where are the filters disposed of? When they are collected? This site must be well contained and off limits.

The procedure has to be easy or people won't follow the rules. No cost like batteries and oil.

There always are those people who believe they do not have to comply with such a law. These people should be fined swiftly and heavily.

They should be burned in a plant that creates energy with the heat such as Ames.

This is good idea but would be too hard to enforce.

This survey is geared to people who change their own oil. We always have our oil changes done at the dealership. So many of the questions don't apply. If more people had their oil changed at dealers, compliance would increase dramatically.

Too much big brother. This is a good area to realize state tax dollar savings - fire more DNR employees.

Use an incinerator to dispose of them.

Whatever method is the easiest for safe collection of the used oil filters, regardless of cost, is in my opinion the route to take. Everyone should be responsible for protecting our environment and the costs procedures you are suggesting are insignificant in making our air/water/soil safer. Anyone who feels different needs a reality check on what the hazards would be.

Yes, fire Ben Bishop. Apartments are supposed to offer a place to put recycling. At a neighborhood association meeting he boasted of not enforcing it. I once lived in a nearby apartment complex of 106 units with three large dumpsters easy to get to, but quite far from there were a couple of recycle bins in the middle of a mud puddle. Hire someone who cares about the environment.

You did not ask me how I dispose of filters. You gave me a list of choices none of which I use. If you really want to know I recycle the used oil into a used oil burning furnace and puncture and drain the filters into that container. The filters are burned with other waste, which causes them to rust out in a short time. No contamination unless you consider rust a contaminant.

You've covered it well. Having served in public office, the general public doesn't like changes or rules even if they are for the good of all. People are also very slow to reply to the ordinance.

Your questions are pretty comprehensive. It would be nice if people could dispose of filters at our city recycling center.

21. There are statewide bans that prohibit lead acid batteries, yard waste, and whole tires from being disposed of in landfills. Special measures have to be taken to deal with these types of waste. Sometimes these occur at the same location as the landfill. Besides these, are there any local landfill bans in your area that require you to dispose of waste using an alternative other than putting it in the can/sack with the rest of your garbage?

For those who answered yes, what are the materials that cannot be disposed of in landfills in your area?

All appliances

Appliances

Appliances, washer/dryer, refrigerator, stove, toilet, furnace, etc

Asbestos

Batteries, tires

Batteries - tires - oil

Batteries, yard waste, and tires

Cardboard, computers, appliances

Certain paints and chemicals

Computer equipment etc

freon, paints and appliances

glass

hazardous materials

Hazardous materials such as oil based paint, pool chemicals, mothballs, stripper, florescent bulbs, solvent, weed killer, bug spray, varnish, brake fluid, kerosene, stain remover, batteries, oven cleaner, metal polish, glue, antifreeze, wood stain.

Insecticides, oil filters, batteries.

Liquid paint, appliances,

Metal, newspapers, plastic bottles

Microwaves, refrigerators

Oil filters

Old refrigerators and freon.

Paint

Paint - you pour it on a gravel road. Thin.

Paint and chemicals

Paint and solvents

Paint batteries

Paint cans

Paint cans and insecticides

Paint cans, hazardous waste

Paint cans, oil cans

Paint products, farm chemicals
 Paint, batteries, tires. Computers, construction materials
 Paint, freon
 Paint, mercury
 Paint, varnish, cleaners, pesticides, etc.
 Paint/chemicals
 Paints and stains
 Paints, solvents, appliances, ni-cad batteries.
 pant household cleaners
 Paper, cardboard or go in a special green box to be disposed of by another company than trash company.
 Tin cans and glass are not picked up with regular garbage.
 Tires and batteries
 Tires, batteries, appliances
 Tires, paint, oil, batteries, spray cans,
 Yard waste, I don't know about tires, the dealer disposes fo them - same goes for batteries.
 Yard waste, oil based pants etc
 Yard waste, paint cans, batteries
 Yard wastes, paint cans, batteries, tires

23. Do you recycle any goods that require you take them to a location to be turned-in?

For those who answered yes, what are they?

AC, furnace, washer/dryer, refrigerator
 Batteries, metal products, oil
 Batteries, paints, chemicals
 Batteries, chemicals, paint, etc.
 Batteries, waste oil
 But I'm not happy about it.
 Cans and glass (5)
 Cans, bottles, used oil
 Cans, glass, cardboard, paper and plastic
 Cans, plastic, glass, newspaper, magazines
 Cans, plastic, newspaper
 Cardboard, bottles
 Cardboard, glass and tin cans
 Cardboard, plastics, magazines, tin cans, newspaper, mixed paper, phone books
 Cardboard, paper, plastic, cans
 Glass (2)
 Glass bottles, cardboard, magazines
 Glass, aluminum, paper, cardboard, plastics
 Glass, bottles, and plastic bags
 Glass, cans, plastic

Glass, plastic, cans, newspaper, cardboard,
Large boxes broken down, we had too many for curbside.
Lawn waste and motor oil
Lead acid batteries
Local dumpsters
Newspaper (2)
Newspaper, cardboard, plastics, glass, cans
Newspaper, plastic
Newspapers, milk jugs, cans, etc.
Newsprint, cardboard, magazines, and paper
Oil
Oil, grass, trees
Old stoves, refrigerator
Old tires, paint buckets
Paint (3)
Paint to Bondurant collection site
Paint, batteries, and tires
Paints, petroleum distillates, pesticides
Paper (3)
Paper, metals, glass
Paper, cardboard, glass
Paper, cardboard, plastic, cans, glass
Paper, glass, plastic, cans
Paper, metal, plastic, and glass and bottles with cans with deposit
Paper, plastic, clear bottles
Paper, plastic, clear glass, and bottles
Phone book
Plastic bags, cans, paper
Plastic, cardboard, etc.
Plastic, glass and newspaper
Plastic, glass, metal, paper, magazines
Plastic, newspaper, tin and aluminum
Plastic, paper, newspaper, glass, tin, cardboard
Plastic, tin, glass, deposit can/bottles, cardboard
Plastics, cardboard, glass, tin cans
Pop and beer cans
Pop cans (7)
Pop cans, aluminum, glass, newspaper, plastic bags
Scrap iron
Stove, refrigerators, etc. and tires.
Tin cans, plastic, newspaper, pop cans
Tires and toxic waste like paint solvents, etc.
Tires, batteries, and paint
Tires, computers, paint
Un-used paint

Used oil when I change it myself
We recycled until curbside began in our area
White paper, colored paper, plastics

25. There are statewide bans that prohibit lead acid batteries, yard waste, and whole tires from being disposed of in landfills. Special measures have to be taken to deal with these types of waste. Sometimes these occur at the same location as the landfill. Besides these are there any local landfill bans in your area that require you to dispose of waste using an alternative other than putting it in the can/sack with the rest of your garbage?

For those who answered yes, what are the materials that cannot be disposed of in landfills in your area?

All appliances
Appliances
Appliances, washer/dryer, refrigerator, stove, furnace
Asbestos
Batteries, tires
Batteries - tires - oil
Batteries, yard waste, and tires
Cardboard, computers, appliances
Certain paints and chemicals
Computer equipment, etc.
Freon, paints and appliances
Glass
Hazardous materials
Hazardous materials such as oil based paint, pool chemicals, mothballs, stripper, florescent bulbs, solven weed killer, bug spray, varnish, brake fluid, kerosene, stain remover, batteries, oven cleaner, metal polish, glue, antifreeze, wood stain
Insecticides, oil filters, batteries
Liquid paint, appliances
Metal, newspapers, plastic bottles
Microwaves, refrigerators
Oil filters
Old refrigerators and Freon
Paint
Paint - you pour it on a gravel road, thinner
Paint and chemicals
Paint and solvents
Paint, batteries
Paint cans
Paint cans and insecticides
Paint cans, hazardous waste
Paint cans, oil cans
Paint products, farm chemicals

Paint, batteries, tires, computers, construction materials

Paint, Freon

Paint, mercury

Paint, varnish, cleaners, pesticides, etc.

Paint/chemicals

Paints and stains

Paints, solvents, appliances, ni-cad batteries

Paint, household cleaners

Paper, cardboard or go in a special green box to be disposed of by another company than trash company.

Tin cans and glass are not picked up with regular garbage.

Tires and batteries

Tires, batteries, appliances

Tires, paint, oil, batteries, spray cans,

Yard waste, I don't know about tires, the dealer disposes of them - same goes for batteries.

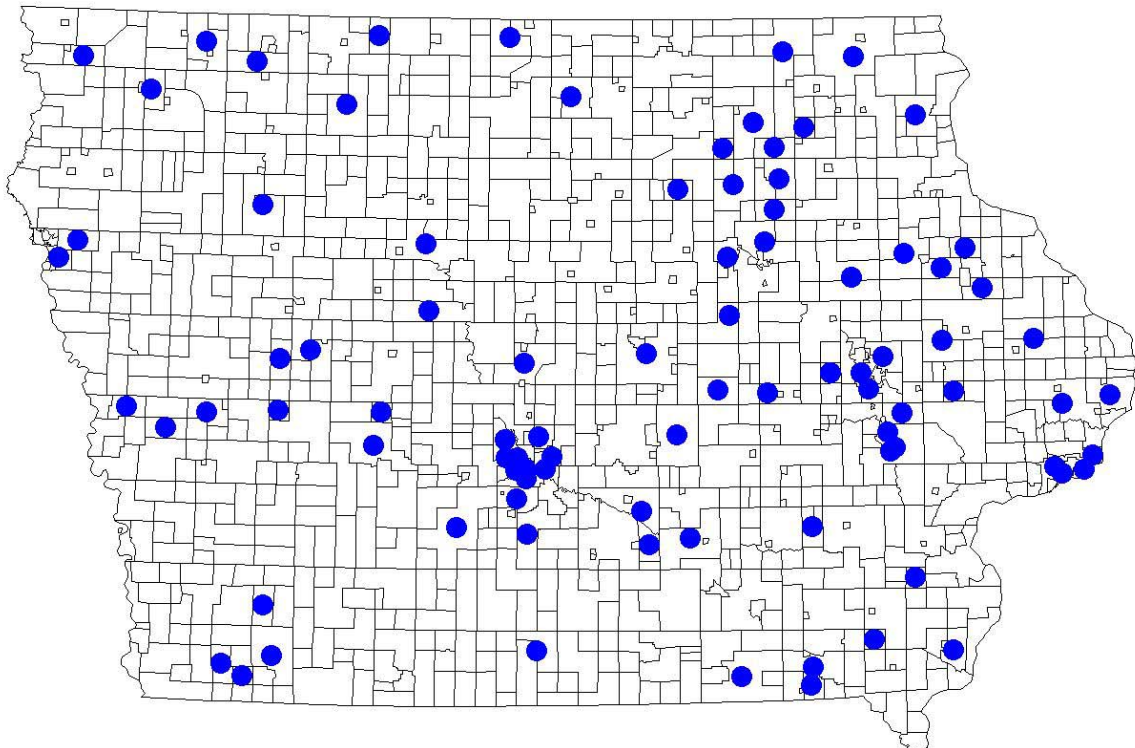
Yard waste, oil based pants, etc.

Yard waste, paint cans, batteries

Yard wastes, paint cans, batteries, tires

24. For the purpose of making sure our sample is representative of the entire state, we would like your 5-digit zip code?

Zip Codes That Contain At Least One Respondent



Determination Procedure for Solid Waste Disposal Bans

Landfills Frequency Report

This survey is to help the Iowa Department of Natural Resources (DNR) develop a procedure to determine the feasibility of banning specific waste materials from landfills. Currently, NO new statewide bans of any material from landfills is being considered. However, DNR has had inquiries over the years, so to be proactive the department is developing a procedure to evaluate whether a specific material can be banned.

This survey is to help test and refine the procedure; so, consider the questionnaire a dry run or mock test. Several different groups are receiving the survey as part of the test: haulers, landfill operators, service stations, and registered voters. Just because the material we will talk about, oil filters, is not under consideration for being banned, do not under-rate the importance of this survey. *Your answers will help shape state policy that affects your bottom line.*

All of your responses to the questions will be confidential (under no circumstances will individual responses be released), so please do not hesitate to freely express yourself. Please answer all the questions. During pretesting the survey has taken 20 minutes. If you wish to comment on any questions or qualify your answers, please feel free to use the space in the margins or on the back cover. Your comments will be read and taken into account.

Thank you for your help and commitment to making Iowa a better place.

Section I. Your personal experience with oil filters

1. How do you dispose of used oil filters at home? [Indicate the appropriate box(s) for each location.]

At home	
36.4%	Whoever changes my oil disposes of it
3%	I just throw it away in the garbage
36.4%	I drain it before disposing of it
6.1%	I puncture and drain it before disposal
18.2%	I do not deal with used oil filters; someone else takes care of this task
0%	I do not have a vehicle
0%	I do not know

2. Who changes the oil in the vehicles in your household? (Check all that apply)

- 42.4% A member of the family or friend
- 30.3% Local service station
- 12.1% Local repair shop
- 12.1% Oil and lube specialty store
- 18.2% Car dealer
- 0% I don't know

Section II. Testing the Procedure

3. Following are three rationales for instituting a landfill ban. For each possible rationale, please tell us how reasonable you believe that reason would be for instituting a ban by marking the appropriate box.

	Very	Somewhat	Not reasonable	Don't know / No answer
<u>Environmental</u> : impact on human health and the environment.	72.7%	15.2%	9.1%	3%
<u>Management</u> : difficulty of managing material at a landfill or operational problems, including worker health and safety.	30.3%	45.5%	21.2%	3%
<u>Volume</u> : significant disposal air-space savings could be achieved by banning the material from disposal.	18.2%	30.3%	48.5%	3%

4. From the following available alternatives choose the one that in your opinion best completes the sentence.

Disposing of used oil filters in landfills:

18.2%	Does not cause problems for myself or anyone else.
78.8%	Is convenient, but it may have negative consequences.
0%	Is something I never think about, and I have no opinion on it.
3%	Don't know / No answer

Granted, you cannot possibly know whether anyone other than yourself would comply with a landfill ban prohibiting used oil filters. So what we are asking you in the next two questions is to share your perception of what might happen.

5. If used oil filters are banned from landfills in Iowa, what percentage of the public do you see engaging in the following activities, assuming they are all available?

Your percent	
12%	a. Putting in separate container for curbside collection
14.4%	b. Taking to a collection site
13.7%	c. Returning to where they bought for refund
37.5%	d. Illegally throwing them in their garbage
19.3%	e. Illegally dumping them

6. If used oil filters are banned from landfills in Iowa, what percentage of businesses that accumulate used oil filters as part of doing business, like service stations and while-you-wait oil change shops, do you see engaging in the following activities, assuming they are all available?

Your percent	
33.6%	Having a separate dumpster for collections
33.4%	Storing the used filters, then returning them in bulk
19.5%	Illegally throwing them in their garbage
10.1%	Illegally dumping them

7. You see a different side of the world than most state regulators. From your vantage point, how hard will it be for your landfill to assure compliance from generators and haulers?

51.5% Very
18.2% Fairly
9.1% Somewhat
15.2% A little
3% Not at all
3% Don't know / No answer

Section III. Business Operations

8. How much additional work will be required at your landfill to insure used oil filters are not dumped?

27.3% An overburdening amount
36.4% A lot
18.2% A moderate amount
9.1% A little
6.1% Practically none
3% Don't know / No Answer

9. How difficult would it be to modify existing compliance procedures for banned material in place at your landfill to include used oil filters?

27.3% Very
21.2% Fairly
21.2% Somewhat
21.2% A little
6.1% Not at all
3% Don't know / No answer

10. In your own words, what additional procedures and infrastructure would be necessary for compliance monitoring at your landfill to ensure used oil filters are not being dumped there?

See Appendix B - Landfill Verbatims

11. Which of the following would be your preference for enforcing the used oil filter ban at your landfill with haulers and customers?

57.6% Flat fine for every used oil filter
30.3% Fine by ton assessed when one is found in a load
3% Fine by ton, assessed when one is found in a load, which has a sliding fee scale so each time an infraction occurs the fine is higher
9.1% Don't know / No answer

12. Can you think of any other way landfills might be able to enforce the ban, other than fining those who do not comply? Feel free to suggest new ideas!

See Appendix B - Landfill Verbatims

13. As a percentage, how much would instituting a used oil filter ban increase your costs of running the landfill?

Percent of Respondents	Percent Increase in Costs
39.4%	0
3%	1
6.1%	2
12.1%	5
9.1%	10
6.1%	15
6.1%	20
3%	50
3%	100
6.1%	500
3%	6000
3%	Don't know / No answer

14. Would you pass this increased cost onto your customers?

66.7% Yes

3% No

27.3% I do not know

3% No answer

15. Does your landfill have the financial resources to absorb any additional costs associated with complying with the ban until the additional cost could be recouped?

12.1% Yes

30.3% Probably

48.5% No

6.1% I do not know

3% No answer

16. Currently there are only two reprocessors/recyclers of used oil filters in the state of Iowa. If more infrastructure was needed, how interested might your landfill's management be in getting into the business of reprocessing/recycling used oil filters?

6.1% Very

3% Fairly

9.1% Somewhat

18.2% A little

57.6% Not at all

6.1% Don't know / No answer

17. If the State provided financial assistance to get the facilities up and running, how would the interest of your landfill's management be affected; would they be more likely, less likely, or would there be no change in their interest?

- 39.4% More Likely
- 36.4% No Change
- 3% Less Likely
- 15.2% I do not know
- 3% No answer

18. If used oil filters are banned from landfills, something must be done with them. Usually their contents are separated and the scrap metal is sold. If there isn't enough infrastructures - reprocessors/recyclers, dumpsters for businesses, collection for residents, etc. - to handle the additional oil filters what should be done?

- 3% Nothing. In the long-run the market will correct itself and provide capacity.
- 15.2% State government will need to provide grants and loans to spark development.
- 72.7% Used oil filters should not be banned unless there is another means in place that is acceptable to dispose of them.
- 3% I do not know
- 6.1% No answer

Section IV. Public Outreach:

19. Currently, to properly dispose of a used oil filter it should be hot drained and punctured before throwing it away. That simply means the top of the filter must be drained near operating temperature and above room temperature for a length of 12 hours and be punctured so more oil may drain out of the filter.

- 39.4% Is this new information to you or
- 54.5% Were you previously aware of it?
- 6.1% Don't know / No answer

20. Think back to the last time there was a landfill ban instituted at your landfill, whether the ban was local or statewide, how long in months did it take before "compliance" at your landfill was reached?

Percent of Respondents	Months
6.1%	1
3%	2
3%	3
18.2%	12
3%	24
6.1%	100
60.6%	Don't know / No answer

21. In your own words, please tell us how does your landfill or how would your landfill educate haulers and other customers that come into direct contact with facility personnel about a used oil filter ban? *See Appendix B - Landfill Verbatims*

22. In your opinion, how much reinforcement will the average person need to become educated about the ban?

- 42.4% A great deal
- 27.3% A fair amount
- 18.2% Some
- 6.1% A little
- 0% Once is enough
- 6.1% Don't know / No answer

23. Used oil filters are small and hard to spot in your weekly garbage pick-up, so it is likely that if you threw one away during a ban, no one would know. Realizing that, how big of a fine, in dollars, would it take to stop the average person from throwing away a used oil filter in the garbage?

Over half of response were \$20.00 or less.

Percentage of Respondents	Dollars
24.2%	\$0 - nothing
21.2%	\$10
12.1%	\$20
12.1%	\$25
6.1 %	\$50
12.1%	\$100
6.1%	\$500
3%	\$1,000
3%	\$10,000

What about businesses?

Over half of response were \$25.00 or less.

Percentage of Respondents	Dollars
30.3%	\$0 - nothing
9.1%	\$10
6.1%	\$20
6.1%	\$25
12.1%	\$50
9.1%	\$100
3%	\$200
6.1%	\$250
6.1%	\$500
3%	\$1,000
3%	\$2,000
6.1%	\$10,000

Section V. Last Thoughts

24. As part of your job you have to stay aware of advances in the technology. How likely is it that technology advances will cause a fundamental redesign of the filter in the next 15 years so that pollution from residual oil is not a concern?

- 6.1% Very
- 18.2% Fairly
- 30.3% Somewhat
- 33.3% Not very
- 3% Not at all
- 9.1% Don't know / No answer

25. Think back over the survey. We asked you a variety of questions about how a used oil filter ban would affect your landfill and its operations. In your own words, are there any other issue areas the procedure needs to consider to make sure a landfill can effectively ban a specific material?

See Appendix B - Landfill Verbatims

Section VI. Experience with Alternate Disposal

Now we need to ask you a few questions for the sake of comparison.

26. There are statewide bans that prohibit lead acid batteries, yard waste, and whole tires from being disposed of in landfills. Special measures have to be taken to deal with these types of waste. Does your landfill handle alternate disposal of the following waste on-site at your facility? (Check all that apply)

57.6%	Oil
66.7%	Lead acid batteries
84.8%	Tires
51.5%	Yard waste
31.4%	Other; please specify: _____

Alternate Disposal - Other Category	Percent of Respondents
Antifreeze	3.0%
Appliances - White goods	21.2%
Cardboard	6.1%
Fluorescent bulbs	6.1%
Metal	6.1%
Electronics	6.1%
Scrap metal	3.0%

27. Does your landfill ban anything besides lead acid batteries, yard waste, and whole tires?

- 75.8% Yes
- 21.2% No
- 3% Don't Know/ No answer

For those who answered yes, what are the other materials that cannot be disposed of in your landfill? See Appendix B - Landfill Verbatims

28. Do you recycle any goods that require you take them to a location to be turned-in?

42.4% No

51.5% Yes; what are they: See Appendix B - Landfill Verbatims

6.1% Don't know / No answer

Section VII. Business Demographics

29. Which of the following best describes the business structure of your landfill?

9.1% Privately owned and operated

87.9% Public entity (city, county or multi-jurisdictional landfill)

3% Other: city owned contract operated

30. As a percentage, approximately how full is your landfill? (Completely full would be 100%.)

Average = 42.2%; Range 0% to 95%

31. To the best of your ability, please describe your service area, the geographic area all haulers and customers who use your facility encompass, using county and city names.

See Appendix B - Landfill Verbatims for a map that contains the service areas and zip codes represented by respondents

32. During the last year, approximately what was the monthly tonnage of waste going into your landfill? Average = 9279 tons; Range 45 tons to 180,000 tons

33. How many employees do you have?

Average = 5.9 Full-time (40 hours per week)

Average = 1.4 Part-time (less than 40 hours per week)

34. What is your job title? See Appendix B - Landfill Verbatims

35. For the purpose of making sure our sample is representative of the entire state, we would like your 5-digit zip code? See Appendix B - Landfill Verbatims for a map that contains the service areas and zip codes represented by respondents

Thank you for taking the time to participate.
Your answers will help shape state policy.

Appendix B - Landfill Verbatims

10. In your own words, what additional procedures and infrastructure would be necessary for compliance monitoring at your landfill to ensure used oil filters are not being dumped there?

A lot of signage, penalties imposed, more frequent inspections, education

A separate collection area and oil filter crusher would be needed. (2)

Additional staff time will be needed at pit area as they go through loads. What kind of fines can be implemented? Are landfills going to be fined? Then do we return the fine to the general public?

At first public education, then visually checking for the first few months, then occasionally.

Batteries are still hidden in loads. With the amount of oil filters that there are, it will be a constant battle.

Unless everything is de-bagged, I would not know how to monitor this.

Because oil filters are so small it is difficult to estimate what procedure and infrastructure would be needed.

Currently periodic screenings and checking with bans more frequently, but we don't have many personnel to perform these tasks.

Death only.

Extra man for waste screening. All dark colored garbage bags would have to be torn open when they are delivered, or require all bags be transparent.

Full time waste sort type inspections would show if they are present but would not identify their source.

It would require seriously detailed quality control inspections at the scales, but it is too easy to hide an oil filter. There would have to be multiple people inspecting during heavy or peak periods.

Landfill sites need to be a collection site for recycling used oil filters. Being in a rural community, most of our oil filters disposal questions came from farmers. Most people are willing to dispose of them correctly if a place for collection is made available.

Load sorts and penalty.

Maybe if we belonged to HHM area service and took used oil there. Public may bring in filters also. This would require a special trip to the landfill and would be hard to enforce.

New infrastructure to be able to inspect each load in detail in order to insure that we are not accepting used oil filters.

Offer a site to dispose used filters, at businesses in each time - most people want to do the right thing. Convenience for public.

Oil filters would be very difficult to monitor. They would have to be brought in separately. The oil filters would have to be a uniform bright color so that operators would notice them.

Provide an option for disposal.

Since most waste is bagged, it would be hard to prove which hauler disposed of the banned items.

Someone to sort through garbage and a place to deposit them.

Spot-check of leads in a sort area.

State would have to impose fines for non-compliance. State would have to inspect motor vehicles stops to ensure they are in compliance.

The haulers or waste company would have the best chance to watch for them.

The landfill would have to have an area set up to store the used oil filters. We would have to have additional staff time and an operator would need to be on duty to inspect loads when they are dumped in the fill site for compliance. Penalties would have to be put in place to discourage non-compliance.

They are so small it is difficult to see in a load. Once they are in a packer they are crushed and the landfill, if they have filters on their load, would have to and remove them for recycling and drain them if needed.

Store at landfills until we have enough for someone to come get them. Storage could be a problem.

We would need to build a small structure for storing and processing the filters, we would need to hire another worker to inspect every load and handle filters.

We would have to take the peoples' word that there aren't any filters in their garbage, or try and check each load for them.

You will never stop used oil filters from being thrown in the trash. Especially from households it is just too easy to hide them in the trash on the curb. This will be no different than all the other bans, ineffective to a large degree.

12. Can you think of any other way landfills might be able to enforce the ban, other than fining those who do not comply? Feel free to suggest new ideas!

Again, proving which hauler or person dumped the banned items would be hard, "Not me and I don't know!" Also give the authority to the collector to report oil to enforcing agency filters in the garbage containers at households.

Core charge/deposit fee, when someone buys a filter then there could be a core fee like with car batteries.

Do not have a good idea.

Educate the public of the threat of drinking water contamination from the heavy metals and carcinogens in the oil filters.

Educating the importance of recycling oil filters. (2)

Fine with the name of offender put in the newspaper.

Grants for service stations and landfills to offset the cost of setting up oil filter collection stations.

It always comes back to money. Do facilities have the time or any money plus the authority to fine?

Once again the agency wants the landfill to be the police. How can we or the hauler stop people from putting them in the waste stream. The only way this can be stopped would be to inspect each bag. They are placed in a collection vehicle and each collection vehicles load would have to be inspected in detail. A better way to do this is intensive public education and mandatory recycling. If you sell them you must take them back.

Public auction with unlimited funding provided by others.

The hauler is not going to always see the filters before he puts the waste into the truck. A fine for the hauler may not be fair. I wouldn't expect the hauler to dig through dumpsters or bags looking for the filters.

The risk to the driver is too great.

The Iowa DNR backs up the landfill fine with one of their own.

The problem is that fining the hauler will not stop the public from hiding used oil filters in their trash.

There isn't an easy way to handle this ban.

Warning first, before a fine is assessed.

21. In your own words, please tell us how does your landfill or how would your landfill educate haulers and other customers that come into direct contact with facility personnel about a used oil filter ban?

A letter to all haulers with all the information on what has to be done. Stressing fines could follow in the future.

Brochure, handouts, face-to-face conversations.

Brochures, news media, public meeting with haulers.

By fine only!

Copies of the state ban would be available at the scale office for haulers and private citizens. Word of mouth works very well.

Direct customer contact, press releases and advertising.

Educate all you want, but enforcement is almost totally impossible.

Educating the haulers is a waste of money - the public must be educated to stop putting them in the waste stream.

Hauler meetings and mailings, listings on websites.

Haulers would be educated at one of their s.a. meetings with landfills. Educating the public is harder to do and it is slower to get the word out. If fines are implemented, this planning area will see an increase in illegal dumping. People seem to resort to this when fees are too high.

I do not know, other than signs and mailings.

Newspaper, meetings, direct contact as people use the landfill.

Newsletter, radio ads, newspaper articles.

Newspaper articles, newspaper ads, handouts to landfill to customers, and letters to haulers.

Pamphlets and direct communication.

Place ads in newspapers, radio and TV, notify haulers, notify service stations, education through our recycling coordinator.

Posters and ads.

Posting notice of used oil filter ban and advertise on radio and in papers.

Public meetings and flyers.

Publicize - post signs at landfill - send memos to all haulers and community government organizations.

Put notices in all the local papers and place a sign at the office.

Service area wide public education.

We invite haulers and customers to our comprehensive planning meetings. This information would be presented at that time. Plus city representatives on our landfill board would be informed at our monthly meeting. They would in turn take it back to their city councils.

We send notices to our haulers and then we also explain in person to the hauler and customers that a ban is in place and that they must comply with it. We ban cardboard, which has worked out fairly well, but there is also a financial incentive to do it. The cardboard can be dumped for free. We also place ads in the local paper and notices on the windows at the landfill informing customers of the ban. Scale operators also do a visual exam of the land when possible.

We usually do a flyer to hand out and advertise in papers and advertisers.

We would issue letters to haulers and communities about the ban. Public relations in area media. Post at the window and in oil drop-off area. (2)

25. Think back over the survey. We asked you a variety of questions about how a used oil filter ban would affect your landfill and its operations. In your own words, are there any other issue areas the procedure needs to consider to make sure a landfill can effectively ban a specific material?

An alternate way of disposing a banned produce needs to be there and easy. Education is necessary in a variety of forms. If a product is banned and an alternate way of disposal is not available and easy it won't be done.

Another mountain of paperwork and consulting fees: DNR amendment to the permit; permit to collect used oil filters amendment to the EPA's permit. Amendment to the storm water runoff permit, amendment to the pollution prevention plan.

Bans are ineffective unless a cheaper, viable alternative exists other than throwing them into the waste stream.

Diesel truck and tractors cause much more air impact on human health, and the environment than used oil filters.

Enforcement at not only the landfills, but IDNR needs to for every infraction and note the fine in local newspapers.

Financial support is #1 - the burden of each facility on fines and education sometimes a dollar amount can't be arrived at since it will consistently be changing.

If certified operators could get a little more enforcement power it would definitely help enforce any ban.

Right now we are basically at the mercy of a board or council that does not want to offend someone.

Public must be educated to the need (if one exists). The alternative must be simple and cheaper than disposal and in existence prior to ban consideration.

Public will require time for re-education, collection site needs to be in place prior to ban.

Require transparent garbage bags, make the hauler liable.

Simplify the process and be realistic and progressive in your demands on the public, as well as landfills enforcement.

Something as small as oil filters is impossible to be 100% detected by haulers. One must remember a lot of pickup is done in dark hours of the day. It would be impossible to detect where they came from at unloading at landfills.

The biggest thing is getting the public's backing and cooperation with a ban.

The cost to build infrastructure that would allow landfills to inspect every load in detail for used oil filters.

The scope needs to start with reduction first. Let people know the hazards through education first, provide infrastructure to take them back and have it in place during the reduction period. Don't ban something before the education training, or infrastructure is set up.

You need to consider that a ban on anything does indeed insure one thing, and that is illegal dumping. Do we want to ban oil filters? With the collection systems in place, is it not better to get filters at the landfill or have them dumped in ditches where they can pollute streams. I am not opposed to a ban but with the state of the economy, we cannot continue to put more financial burdens on the public. Industry needs to be held more responsible for recycling the product it produces.

27. Does your landfill ban anything besides lead acid batteries, yard waste, and whole tires?

For those who answered yes, what are the other materials that cannot be disposed of in your landfill?

Anything liquid, appliances, hazardous materials, florescent bulbs

Appliances (3)

Appliances and brown goods

Appliances, scrap metal, recyclable plastic, tin, aluminum, newsprint, cardboard

Cardboard (2)

Cardboard, paints, toxins, trees, stumps, recyclables like newspapers and plastic

Cardboard, TVs, computer monitors

Commercial, corrugated paper

Contaminated soil

Dead animals, deer carcasses, asbestos

Fragile asbestos

Free flowing liquids, flammables, explosives, radioactive waste

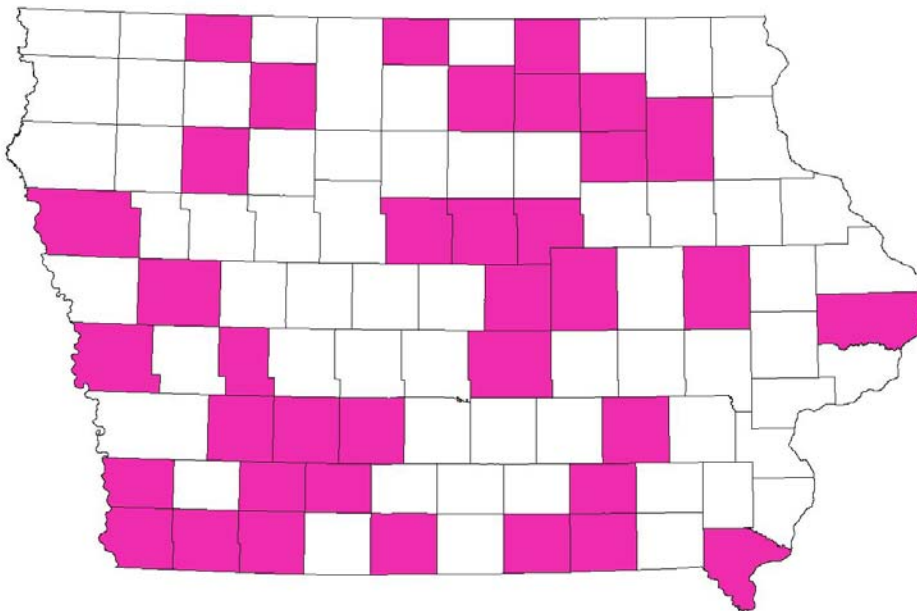
Free liquids, mercury oxide, nickel cadmium batteries, waste oil, waste oil filters, appliances, infections and biomedical waste, PCB's and asbestos material

Hazardous materials, dead animals, car bodies, recyclable cardboard, paper, tin, # 2 plastics

Metal appliances, pesticide jugs
 Nickel cadmium batteries
 Oil, white goods, brown goods
 We ban the burial of cardboard; it has to be recycled at our landfill
 We don't ban antifreeze, but we do recycle it; appliances are banned
 White goods
 White goods, liquid
 White goods, metal, dead animals

31. To the best of your ability, please describe your service area, the geographic area all haulers and customers who use your facility encompass, using county and city names.

Counties for which respondent Landfills provide Service



34. What is your job title?

Assistant Environmental Services Director
 Chairman of Solid Waste Commission (3)
 Co-Manager
 Director (6)
 Director of Floyd Mitchell Chickasaw Solid Waste
 Director of Health, Inspections and Solid Waste
 Director of Operations & Education (2)
 District Manager (2)
 Landfill Chairman
 Landfill Commission Board Member
 Landfill Director/Manager

Landfill Manager
Landfill Superintendent
Manager (5)
Planner
Public Works Directors
Recycle Coordinator
Secretary
Solid Waste Manager

35. For the purpose of making sure our sample is representative of the entire state, we would like your 5-digit zip code?

See map for verbatim #33

Service Station Frequency Report

Determination Procedure for Solid Waste Disposal Bans

This survey is to help the Iowa Department of Natural Resources (DNR) develop a procedure to determine the feasibility of banning specific waste materials from landfills. Currently, NO new statewide bans of any material from landfills is being considered. However, DNR has had inquiries over the years, so to be proactive the department is developing a procedure to evaluate whether a specific material can be banned.

This survey is to help test and refine the procedure; so, consider the questionnaire a dry run or mock test. Several different groups are receiving the survey as part of the test: haulers, landfill operators, service stations, and registered voters. Just because the material we will talk about, oil filters, is not under consideration for being banned, do not under-rate the importance of this survey. Your answers will help shape state policy that affects your bottom line.

All of your responses to the questions will be confidential (under no circumstances will individual responses be released), so please do not hesitate to freely express yourself. Please answer all the questions. During pretesting the survey has taken 20 minutes. If you wish to comment on any questions or qualify your answers, please feel free to use the space in the margins or on the back cover. Your comments will be read and taken into account.

Thank you for your help and commitment to making Iowa a better place.

Section I. Your experience with oil filters

1. How do you dispose of used oil filters at home and what is the procedure for disposing of them on the job?
[Indicate the appropriate box(s) for each location.]

At home	On the job	
12.9%		Whoever changes my oil disposes of it
0%	2.9%	I just throw it away in the garbage
11.4%	41.4%	I drain it before disposing of it
5.7%	38.6%	I puncture and drain it before disposal
8.6%	7.1%	I do not deal with used oil filters; someone else takes care of this task
0%	0%	I do not have a vehicle
0%	1.4%	I do not know

2. There are a lot of factors that affect the number of oil changes you might perform: time of year, special reduced prices, etc. Considering all that, approximately how many oil changes does your shop perform per month?
Average = 385 changes; Range 10 to 12,000

3. Who changes the oil in the vehicles in your household? (Check all that apply)
- 10% A member of the family or friend
 - 42.9% Local service station

- 5.7% Local repair shop
- 38.6% Business at which I work
- 16.8% Oil and lube specialty store
- 4.3% Car dealer
- 0% I don't know

Section II. Testing the Procedure

4. Following are three rationales for instituting a landfill ban. For each possible rationale, please tell us how reasonable you believe that reason would be for instituting a ban by marking the appropriate box.

	Very	Somewhat	Not reasonable	Don't know/ No answer
<u>Environmental</u> : impact on human health and the environment.	34.3%	47.1%	14.3%	4.3%
<u>Management</u> : difficulty of managing material at a landfill or operational problems, including worker health and safety.	10%	50%	35.7%	4.3%
<u>Volume</u> : significant disposal air-space savings could be achieved by banning the material from disposal.	7.1%	47.1%	40%	5.7%

5. From the following available alternatives choose the one that in your opinion best completes the sentence.

Disposing of used oil filters in landfills:

- 28.6% Does not cause problems for myself or anyone else.
- 60% Is convenient, but it may have negative consequences.
- 8.6% Is something I never think about, and I have no opinion on it.
- 2.9% Don't know / No answer

6. If used oil filters are banned from landfills, which of the following methods would you want as options for collection at your work? (Select all those with which you agree)

- 31.4% a. Pick-up in a separate dumpster for an additional fee
- 20% b. Collect, store, and return used filters to where you bought them for a fee less than pick-up
- 55.7% c. Take used oil filters to a collection site at no extra charge to you

[Follow-up for those who selected c.] In miles, approximately how far would you be willing to drive to that collection site? Average = 6.1 miles; Range 0 to 30 miles

Between the three options listed above, which would be your preferred disposal method? (Write the letter next to the option (a, b, c) in the space provided:) _____

Percent	Response category
24.3%	a. Pick-up in a separate dumpster for an additional fee
15.7%	b. Collect, store, and return used filters to where you bought them for a fee less than pick-up
48.6%	c. Take used oil filters to a collection site at no extra charge to you
11.4%	Don't know / No answer

Granted, you cannot possibly know whether anyone other than yourself would comply with a landfill ban prohibiting used oil filters. So what we are asking you in the next two questions is to share your perception of what might happen.

7. If used oil filters are banned from landfills in Iowa, what percentage of the public do you see engaging in the following activities, assuming they are all available?

Respondents' Average Percent	
13.9%	a. Putting in separate container for curbside collection
14.3%	b. Taking to a collection site
10.8%	c. Returning to where they bought for refund
33.7%	d. Illegally throwing them in their garbage
22.1%	e. Illegally dumping them

8. If used oil filters are banned from landfills in Iowa, what percentage of businesses that accumulate used oil filters as part of doing business, like service stations and while-you-wait oil change shops, do you see engaging in the following activities, assuming they are all available?

Your percent	
46%	Having a separate dumpster for collections
32.1%	Storing the used filters, then returning them in bulk
9.2%	Illegally throwing them in their garbage
5.3%	Illegally dumping them

9. You see a different side of the world than most state regulators. From your on-the-ground vantage point, how hard will it be for DNR to assure compliance from service stations and quick oil and lube franchises? Compliance would mean special handling, separation into another container, and either collection on-site (most likely by a subcontractor) or delivery to a collection center.

22.9% Very
 21.4% Fairly
 28.6% Somewhat
 14.3% A little
 10% Not at all
 2.9% Don't know / No answer

10. Chances are that if there is a ban on oil filters, compliance will never reach 100%, but it will hopefully approach it. In months, how long do you think it will take businesses to reach the maximum level of compliance possible?
Average = 12.3 months; Range 0 to 90 months

11. What percentage do you estimate maximum compliance for businesses would be? In other words, what percentage of all businesses that deal with used oil filters, as a part of conducting business, will comply with whatever additional collection responsibilities they are required to perform? Average = 79.8%

12. If used oil filters are banned from landfills, something must be done with them. Usually their contents are separated and the scrap metal is sold. If there isn't enough infrastructure - reprocessors, dumpsters for businesses, collection for residents, etc. - to handle the additional oil filters, what should be done?
- 10% Nothing. In the long-run the market will correct itself and provide capacity
 - 7.1% State government will need to provide grants and loans to spark development
 - 68.6% Used oil filters should not be banned unless there is another means in place that is acceptable to dispose of them.
 - 12.9% I do not know
 - 1.4% No answer

Section III. Business Operations

13. A ban on used oil filters for your business means changes in collections. The capacity to institute a ban for you would be the space to store the filters and a vendor to come remove them. Do you have...

Yes	No	No answer	
65.7%	28.6%	5.7%	Space for another dumpster
34.3%	54.3%	11.4%	Short run financing to absorb any additional cost for disposal until the charge could be instituted

14. If evidence were presented that a ban was warranted, would a nominal disposal fee of a few dollars per filter, less than \$5, be something you could live with?
- 14.3% Yes
 - 65.7% No
 - 17.1% I'm not sure
 - 2.9% No answer
15. How much would an increase of \$5 extra dollars in overhead per oil change affect your shop's profitability?
- 61.4% Greatly
 - 24.3% Noticeably
 - 4.3% Not much
 - 5.7% Practically none
 - 4.3% Don't know / No answer
16. Would increasing your shop's overhead by up to \$5 per oil change cause you to increase the amount that you charge a customer for an oil change?
- 92.9% Yes
 - 2.9% No
 - 1.4% I am not certain
 - 0% It is not my decision alone
 - 2.9% Don't know / No answer
17. If you were to pass this increase in overhead cost along to your customers, relying on your experience in the business, how much would you say the number of oil changes your shop performs will decrease?
- 18.6% Greatly
 - 55.7% Noticeably
 - 17.1% Not much

- 0% Practically none
- 0% None
- 0% They might increase
- 8.6% Don't know / No answer

18. Assuming that banning used oil filters from landfills statewide would increase the cost of an oil change, would a statewide ban affect how often you get your oil changed? Would you get your oil changed:

- 1.4% More often
- 1.4% A little more often
- 55.7% The same
- 2.9% A little less often
- 30% Less often
- 8.6% Don't know / No answer

19. Used oil filters are small and hard to spot in your weekly garbage pick-up, so it is likely that if you threw one away during a ban, no one would know. Realizing that, how big of a fine, in dollars, would it take to stop the average person from throwing away a used oil filter in the garbage? Average = \$87.14 (5% trimmed mean)

What about businesses?

\$ Average = \$190.32 (5% trimmed mean)

45.7% I would never break the law, regardless of whether there was not a punishment

Section IV. Public Outreach

20. Currently, to properly dispose of a used oil filter it should be hot drained and punctured before throwing it away. That simply means the top of the filter should be drained near operating temperature and above room temperature for a length of 12 hours and be punctured so more oil may drain out of the filter.

- 20% This is new information to me
- 72.9% I was previously aware of this information
- 7.1% Don't know / No answer

21. Think back to the last time there was a change in garbage collections, how did you find out about the change? (check all that apply)

- 10% Notice on my garbage can or in my door about change in collection
- 65.7% Mailing from company or city
- 0% Collections salesperson stopped by
- 38.6% Newspaper
- 4.3% Internet
- 14.3% Radio

21. When you are not sure what the collection rules are, what do you do? (check all that apply)

- 2.9% Check the Internet
- 35.7% Call my city hall
- 61.4% Call the garbage collection sales representative
- 12.9% Other; *please specify: See Appendix C - Service Station Verbatims*

22. In your opinion, how much reinforcement will the average person need to become educated about the ban?

- 41.4% A great deal
- 37.1% A fair amount
- 10% Some
- 1.4% A little
- 1.4% Once is enough
- 8.6% Don't know / No answer

Section V. Last Thoughts

23. As part of your job you have to stay aware of advances in the technology of cars and car parts. How likely is it that technology advances will cause a fundamental redesign of the filter in the next 15 years so that pollution from residual oil is not a concern?

- 15.7% Very
- 15.7% Fairly
- 25.7% Somewhat
- 27.1% Not very
- 5.7% Not at all
- 10% Don't know / No answer

24. Think back over the survey. We asked you about how you deal with used oil filters: the volume you handle, how you dispose of them, how you would prefer to dispose of them, the level of education the public would need; and the cost to your business. In your own words, are there any other issues the procedure needs to take into consideration to make sure business is protected?

See Appendix C - Service Station Verbatims

Section VI. Experience with Alternate Disposal

Now we need to ask you a few questions for the sake of comparison.

25. There are statewide bans that prohibit lead acid batteries, yard waste, and whole tires from being disposed of in landfills. Special measures have to be taken to deal with these types of waste. Does your business dispose of the following waste by taking special measures? (Check those that apply)

81.4%	Oil
68.6%	Car batteries
65.7%	Tires
24.3%	Other; please specify: <i>See Appendix C - Service Station Verbatims</i>
12.9%	Other; please specify: <i>See Appendix C - Service Station Verbatims</i>
2.9%	Other; please specify: <i>See Appendix C - Service Station Verbatims</i>

26. Besides these, are there any local landfill bans in your area that require you to dispose of waste using an alternative other than putting it in the can/sack/dumpster with the rest of your garbage?

- 32.9% Yes
- 31.4% No
- 31.4% I don't know
- 4.3% No answer

For those who answered yes, what are the other materials that cannot be disposed of in landfills in your area?

See Appendix C - Service Station Verbatims

27. Do you charge your customers any environmental clean-up fees for services that you perform other than those associated with disposing of oil filters?

65.7% No

25.7% Yes: please specify; *See Appendix C - Service Station Verbatims*

8.6% Don't know / No answer

28. On a scale of 0 to 10, where 0 is completely accepting of the fee and 10 is against having to pay the fee, where would you rate your average customer?

Percent	Response category
14.3%	0 - completely accepting
0%	1
2.9%	2
4.3%	3
5.7%	4
20%	5
5.7%	6
8.6%	7
10%	8
5.7%	9
21.4%	10 - completely against having to pay the fee
1.4%	Don't know / No answer

8.6% most do not even notice the fee

29. Do you recycle any goods that require you take them to a location to be turned-in?

57.1% No

37.1% Yes; what are they: *See Appendix C - Service Station Verbatims*

5.7% Don't know / No answer

Section VIII. Business Demographics

30. How long have you been in business? Average = 24.9 years; Range 1 to 76 years

31. Are you a franchisee?

25.7% Yes

68.6% No

0% I do not know

5.7% No answer

32. How many employees do you have?

Average = 6.2; Range 1 to 45 Full-time (40 hours per week)

Average = 4.8; Range 1 to 25 Part-time (less than 40 hours per week)

33. What is your job title? See Appendix C - Service Station Verbatims

34. For the purpose of making sure our sample is representative of the entire state, we would like your 5-digit zip code? See Appendix C - Service Station Verbatims for a map of zip code spatial distribution

Thank you for taking the time to participate.
Your answers will help shape state policy.

Appendix C - Service Station Verbatims

21. When you are not sure what the collection rules are, what do you do? (check all that apply)

Other; *please specify*:

- Ask neighbor
- Ask the garbage man
- Call Petroleum Marketers
- Contact state department
- Franchise legal department
- Guess
- Hazardous waste call state or federal agency
- Information from the state
- Till garbage picks it up

24. Think back over the survey. We asked you about how you deal with used oil filters: the volume you handle, how you dispose of them, how you would prefer to dispose of them, the level of education the public would need; and the cost to your business. In your own words, are there any other issues the procedure needs to take into consideration to make sure business is protected?

\$5.00 per filter is way too high. The cost associated with each filter cannot exceed \$.25-\$.50. Crushing oil filters is an option not mentioned. That removes 99% of oil instantly with out having to drain, making them much more friendly and less hazardous to the landfill area.

A furnace should be made to burn them and sell the scrap to a junkyard or have auto company change the designs of them.

Any increase in costs will only cause the elimination of small businesses since larger chains can spread these fees (taxes) over a larger number of products they sell.

As long as the cost to recycle filters did not get too high all businesses should be required to handle them this way making the playing field level. Currently the small volume service centers are the ones doing most of the polluting.

Banning oil filters from landfills will create more illegal dumping. I think you should consider (somehow) attaching the disposal fee per filter onto the price of purchase. The public will be more willing to pay at the point of purchase because they need the filter. Paying the price of disposal after it is used, to most, will be harder for some to accept. Money generated from fees on new filters can be used to set up collection sites and to pay a recycler to handle the waste.

Currently, many repair shops do oil changes below cost as a loss leader in order to inspect cars and sell larger repairs because they are less likely to get inspected. They are also more likely to ignore laws. If the costs to recycle filters is too high, people will change where they get old filters changed due to price increases - from quick lubes to repair shops to at home. This means they will move to scenarios that are considerably less likely to comply. The key is finding a low-cost solution that does not promote this trend.

Forget the ban just continue to require filters to be punctured or smashed and drained properly before disposal.

Get a better, unbiased person or group to create the next survey.

Government should not put a "tax" on us unless they provide relief (credit of cost). I question the import of used oil filters.

Handling/transporting a dirty/oily/used filter to the point of purchase for a refund would not be accomplished by the majority of the public who performs their own oil changes. Separate dumpsters and pick up would be ok, but not at the cost of \$5 per filter. An average oil change costs \$13.95 to \$19.95. This would cause a 25% increase and as a result more people and back yard shops would perform more oil changes.

I already crush and drain my filters over night. They are put in 55 gallons drums and I pay to have them picked up and recycled.

I say the only way to stop oil and oil filters batteries is to make the public take their cars and trucks to a shop and change oil, etc. That takes care of the oil and filters properly so take the oil and filters out of Wal-Mart and Kmart, Target, etc. so the public can not change their own oil and throw the oil on the ground because I say 75% that change their own oil do not dispose of it properly.

I think a ban on used oil filters would be very difficult. If not to meet standards is really the only answer that would still lead to an increase of cost on the filter. We are required by law in our county to recycle paper, plastic, cardboard, glass, etc. which I do, but I know of many who don't do that regardless of fines.

I would like evidence showing oil filters to be a hazard. What about the crushing of oil filters philosophy? Is the oil contamination in landfills severe enough to impose such a law?! There are a lot of companies that support these types of extremely outrageous laws so they can charge very lucrative charges for their services. It is hard to understand how a \$2.00 oil filter could have an environmental charge of up to \$5.00. I have not heard of evidence to support an oil filter regulation that you speak of in this questionnaire.

If you charge for dumping filters in landfills you will take a lot of business away from the shops that are trying to make a living and more do-it-yourselfers will illegally get rid of the old filters.

Instead of fees and fines, use incentives. Most businesses and individuals would properly recycle oil filters if there was a deposit site in each town. Then pay a contractor a fee to collect every so often. The money could be gained from DNR by selling more deer hunting licenses (thereby thinning the deer population and decreasing accidents). The contractor also gets paid from the sale of scrap metal and oil. I am tired of auto service businesses always paying for environmental concerns. There has been a one-cent tax on all fuels (AST fund) for years to pay for clean up. This past year the state raided the fund. We in this business have recycled oil, batteries, and scrap metals for decades. It would be better to provide incentives for the businesses concerned (i.e. tax credits or payment of each filter deposited) instead of taking an adversarial stance toward businesses - adapt a partnership relationship. We all want a clean environment. We would do our part, but we would expect the state to do the same.

It will be just one more thing to add to the burden of small business that is already over-regulated, over-taxed, and one more "fine-able" item to add to the state's budget.

Just one more law the small businessman has to pay for.

Level the playing field. If a business sells oil or filters, the customer should have the right to return the used product for proper disposal.

Look into alternatives and give businesses a choice of who and how they will dispose of filters - we have been using a pick up service for years.

Make sure they are collected by someone that can take care of them quickly (unlike the tires that have been collected around Fort Dodge).

Most reputable automotive businesses are already having filters hauled away by a recycler. Many smaller mom & pop repair facilities are just throwing them away. Yet they are charging environmental fees to the

consumer. In my view these are clearly fraudulent practices, a total ban will escalate current "haul away fees" by three or four times. Instead offer a tax credit for voluntary compliance.

My comment is that I think your \$3-5.00 is way too high per filter. I am crushing my filters and having them collected at a cost of less than \$.25 per filter. We have been doing this for over two years. Smaller volume or not crushing could result in a slightly higher price but not \$3-5.00. Thanks for listening.

No governmental intervention! There is no information or facts that wasted oil filters contribute to environmental problems.

Oil change businesses will not be the problem. Do-it-yourselfers and small fleets will not pay fees to dispose of filters - we have experienced this in tires and used oil. Paint, and chemicals disposal cost must be included in purchase price.

Public awareness on the disposal of used filters would reduce the amount of do-it-yourselfers and private individuals who hide a single used filter in their trash otherwise it would be a wasted effort. It's simply too easy to hide. Some would simply dump their old filters in somebody else's trash or dumpster. (car washes, apartment buildings, etc.) Using shops like mine as a drop off site has worked pretty well.

The additional time and paperwork to account for and track the items.

The best way it to crush the oil filters and then have them picked up.

There are companies in operation who collect, transport, store and dispense of oil filters. They should be made to be more reasonable about their fees.

There should be some sort of government funding or assistance available to small business if a charge is put into effect. There are always monies available and they are wasted on other topics.

Time will keep me from doing other things in my shop that require my time. Will it be efficient for me to do this?

Used filters in rivers and ditches will cause many more environmental problems than sending them to the landfill.

We currently charge \$1.00 to dispose of filters. Renewable Resource Recovery out of Ankeny picks them up monthly. However just like tires, some how many filters appear in the middle of the night in our dumpster and around our waste oil barrel. What bothers me is that we spent \$60,000 to comply with DNR on our underground tanks and to clean up our property. Do-it-yourselfers just dump filters on the ground and in our dumpster without draining for 12 hours and the oil spills all over my clean ground. This really concerns me if we pass this into law. The public will need cheap alternatives.

We recycle now.

Yes - we already incur the costs of consumers illegally disposing of oil and oil filters on our premises. There are fines, however, no one seems to be able to impose them. With a ban, this illegal dumping will become a greater problem than it already is. Businesses are already required to dispose of oil filters through a contractor and cost to the company or fare severe fines. These are costs that cannot be increased into our price.

Yes, there would have to be some way to protect businesses from people that illegally drop off used oil, oil filters or other hazardous parts on their properties after hours.

You must have a good alternative and it must be accessible if it is to work. We do not deal in auto mechanics, etc. as we are strictly a convenience store so I don't feel I can give a good response from a business point of view.

25. There are statewide bans that prohibit lead acid batteries, yard waste, and whole tires from being disposed of in landfills. Special measures have to be taken to deal with these types of waste. Does your business dispose of the following waste by taking special measures? (Check those that apply) Other; please specify:

- Antifreeze (9)
- Brake fluid
- Cardboard
- Filters
- Fluorescent bulbs (2)
- Freon
- Mop water
- Oil filters (3)
- Oil filters - I now pay for a 55 gallon barrel to be dumped
- Oil filters crushed and drained
- Recycle cardboard and metals
- Scrap metal
- Solvents
- Steel, iron, copper, aluminum, brass
- Tin
- Used fuel
- Yard waste

26. Besides these are there any local landfill bans in your area that require you to dispose of waste using an alternative other than putting it in the can/sack/dumpster with the rest of your garbage?

For those who answered yes, what are the other materials that cannot be disposed of in landfills in your area?

- Antifreeze
- Any hazardous waste
- Cardboard, batteries and tires are not allowed
- Cardboard, lawn clippings, tree limbs, leaves
- Cardboard, paint, chemicals, fluorescent, light tubes
- Fluorescent bulb
- Grass, batteries, tires
- Oil filters (2)
- Paint
- Paint, etc.
- Paint, florescent light bulbs,
- Paints, batteries, hazardous materials
- Paper, cardboard, plastic, glass, brush and yard waste
- Paper, plastic, glass, cardboard and boxboard
- Special sacks - recycle box
- Tires and appliances
- Yard waste (2)
- Yard waste, paint

27. Do you charge your customers any environmental clean-up fees for services that you perform other than those associated with disposing of oil filters?

For those you answered yes: please specify:

\$2 fee for disposing of oil, oil filters and antifreeze
Approximately 2.9% of sale to cover items listed in #25
No, but are seriously thinking about this
Charge for disposal of tires
EPA charge of \$1.50 for used oil
I would if I collected them
Oil rags, towels, oil dry
Old tires, anti freeze, oil filters
Shop fee on all invoices above our oil change. \$3.00 cleanup fee, etc.
Tire disposal (8)
Waste oil to store and dispose of it
While I have to have filters hauled away, I do not charge an environmental fee to any customers

29. Do you recycle any goods that require you take them to a location to be turned-in?
For those you answered yes, what are they?

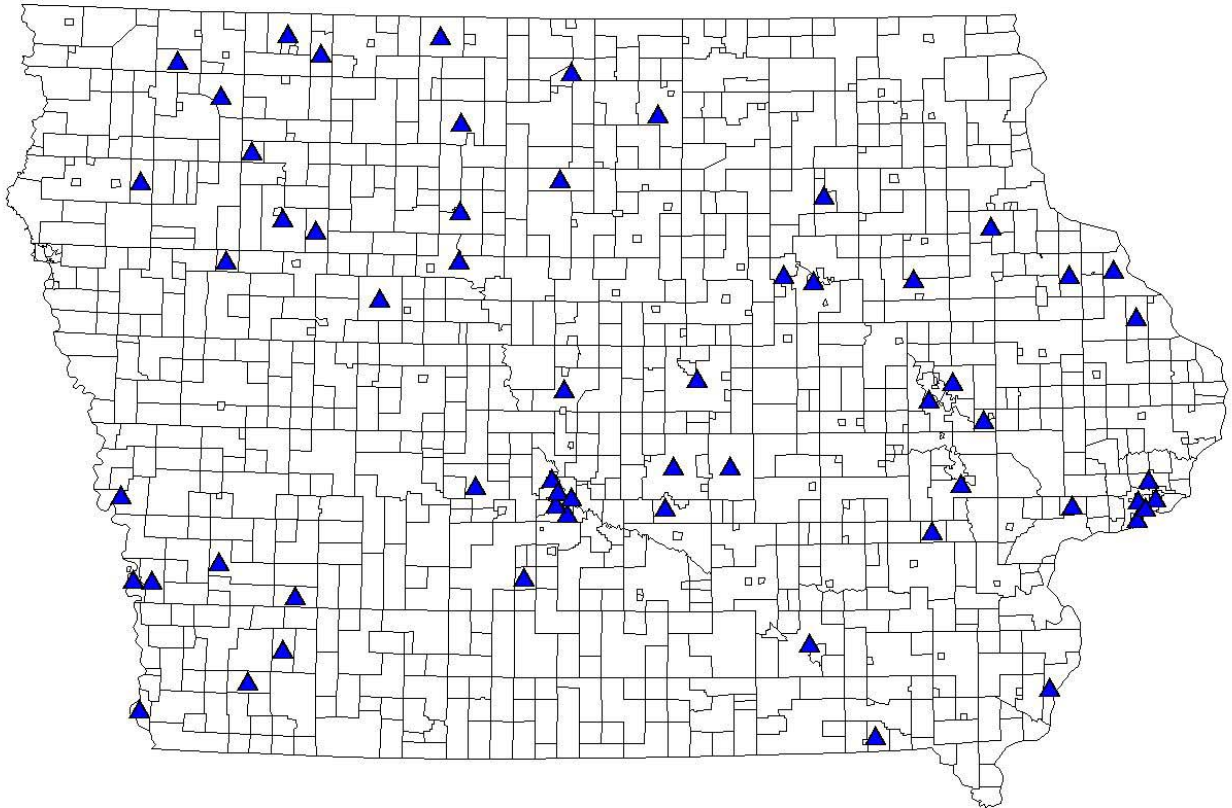
Batteries and oil
Batteries and tires
Cardboard
Cardboard and plastic
Cardboard, glass, plastic
Cardboard, plastic
Cardboard, tin, cast
Junk tires, cardboard
Motors, exhaust, scrap metal
Oil and oil filters, antifreeze
Paint, chemicals, computers
Paper and cans
Paper products
Paper, plastic
Paper, used oil
Plastic containers
Plastics bottles and paper
Pop bottles & cans (5)
Tires (3)
Yard waste

33. What is your job title?
Co-Owner
General Manager
Manager (7)
Manager/Owner
Managing Partner
Operations Director
Owner (37)

Owner/Operator (5)
Petroleum Manager
President (9)
Secretary/Treasurer
Service Manager
Vice President

34. For the purpose of making sure our sample is representative of the entire state, we would like your 5-digit zip code?

Zip Codes that Contain At Least One Respondent



Advisory Committee

Determination Procedure for Solid Waste Disposal Bans

Special directions: Note that if you are a district manager for a large hauler that has more than one operating region, these questions are intended to apply to you and your region, not the company's entire operations.

Haulers Frequency Report

This survey is to help the Iowa Department of Natural Resources (DNR) develop a procedure for banning specific waste materials from landfills. Currently, NO new statewide bans of any material from landfills is being considered. However, DNR has had inquiries over the years, so to be proactive the department is developing a procedure to evaluate whether a specific material can be banned.

This survey is to help test and refine the procedure; so, consider the questionnaire a dry run or mock test. Several different groups are receiving the survey as part of the test: haulers, landfill operators, service stations, and registered voters. Just because the material we will talk about, oil filters, is not under consideration for being banned, do not under-rate the importance of this survey. Your answers will help shape state policy that affects your bottom line.

All of your responses to the questions will be confidential (under no circumstances will individual responses be released), so please do not hesitate to freely express yourself. Please answer all the questions. During pretesting the survey has taken 20 minutes. If you wish to comment on any questions or qualify your answers, please feel free to use the space in the margins or on the back cover. Your comments will be read and taken into account.

Thank you for your help and commitment to making Iowa a better place.

Section I. Your personal experience with oil filters

1. How do you dispose of used oil filters at home? [Indicate the appropriate box(s) for each location.]

At home	
76.9%	Whoever changes my oil disposes of it
7.7%	I just throw it away in the garbage
15.4%	I drain it before disposing of it
0%	I puncture and drain it before disposal
15.4%	I do not deal with used oil filters; someone else takes care of this task
0%	I do not have a vehicle
0%	I do not know

2. Who changes the oil in the vehicles in your household? (Check all that apply)

23.1% A member of the family or friend
53.8% Local service station
7.7% Local repair shop
7.7% Oil and lube specialty store
46.2% Car dealer
0% I don't know

Section II. Testing the Procedure

3. Following are three rationales for instituting a landfill ban. For each possible rationale, please tell us how reasonable you believe that reason would be for instituting a ban by marking the appropriate box.

	Very	Somewhat	Not reasonable
<u>Environmental</u> : impact on human health and the environment.	23.1%	46.2%	30.8%
<u>Management</u> : difficulty of managing material at a landfill or operational problems, including worker health and safety.	30.8%	7.7%	61.5%
<u>Volume</u> : significant disposal air-space savings could be achieved by banning the material from disposal.	7.7%	38.5%	53.8%

4. From the following available alternatives choose the one that in your opinion best completes the sentence.

Disposing of used oil filters in landfills:

30.8%	Does not cause problems for myself or anyone else.
30.8%	Is convenient, but it may have negative consequences.
23.1%	Is something I never think about, and I have no opinion on it.

Granted, you cannot possibly know whether anyone other than yourself would comply with a landfill ban prohibiting used oil filters. So what we are asking you in the next two questions is to share your perception of what might happen based on your experience in collections.

5. If used oil filters are banned from landfills in Iowa, what percentage of the public do you see engaging in the following activities, assuming they are all available?

Your percent	
8.8%	a. Putting them in separate container for curbside collection
12.8%	b. Taking them to a collection site
23.5%	c. Returning them to where they were bought for a refund
46.5%	d. Illegally throwing them in their garbage
19.2%	e. Illegally dumping them

6. If used oil filters are banned from landfills in Iowa, what percentage of businesses that accumulate used oil filters as part of doing business, like service stations and while-you- wait oil change shops, do you see engaging in the following activities, assuming they are all available?

Your percent	
22.3%	Having a separate dumpster for collections
38.8%	Storing the used filters, then returning them in bulk
16%	Illegally throwing them in their garbage
15.2%	Illegally dumping them

7. It would not be haulers' responsibility to ensure that generators comply with a used oil filter ban, but practically speaking haulers are responsible for what they unload at the landfill. From your vantage point, how hard will it be for your collectors to assure generators comply with a used oil filter ban?
- 69.2% Very
 - 0% Fairly
 - 15.4% Somewhat
 - 7.7% A little
 - 7.7% Not at all
8. As was just said in the last question, in practicality haulers are the ones who become responsible, usually financially, for generators who put banned material in their waste despite regulations to the contrary. Do you have any ideas you would like to share on how that responsibility might be put back on the generators themselves?

Haulers are not enforcement agencies. If you're going to make a law, make sure you have someone in place to enforce it.

Have places that sell the hazardous products be responsible for taking them back. A place that sells appliances must include the disposal of the old one in the new price. A place that sells oil and filters must accept the old back. This would centralize collection points and force consumers to not dispose improperly because they have already paid for the disposal costs when they bought the new.

If the generator is known, he should be responsible for all fines.

Make the generators have some place to put them. Then somebody can come get them.

Pass through for any charges or penalties and public education.

State or county inspectors for compliance, fines for noncompliance.

Unless you have the time and money to sort every dump you make it impossible for us, as haulers, to accomplish this task and be 100% sure there isn't a single oil filter in our load, but we will get the punishment anyway!

Section III. Business Operations

9. From the perspective of operating your business, if used oil filters are banned, which of the following methods would you support for residential and commercial collections? (Select all those with which you agree)

Commercial	Residential	
15.4%	15.4%	a. Curbside pick-up in a separate container for an additional fee
53.8%	76.9%	b. Used oil filters are returned to where they were purchased by customer (haulers could contract with commercial customers to provide this service)
61.5%	53.8%	c. Used oil filters must be returned to a collection site by generator (haulers could contract with commercial customers to provide this service)

Between the three options listed above, which would be your preferred disposal method for? (Write the letter next to the option (a, b, c) in the space provided.)

Preferred Commercial	Preferred Residential	
7.7%	7.7%	a. Curbside pick-up in a separate container for an additional fee
15.4%	46.2%	b. Used oil filters are returned to where they were purchased by customer (haulers could contract with commercial customers to provide this service)
76.9%	46.2%	c. Used oil filters must be returned to a collection site by generator (haulers could contract with commercial customers to provide this service)
100%	100%	Total

10. A ban on used oil filters would mean changes in collections. Having the capacity to institute a ban means many things for your business. If used oil filters were banned, and haulers were responsible for collecting both residential and commercial used oil filters, would your business need more of any the following (check all that apply)? If so, how many more, as a percentage of what you have now, would you business need to buy/hire?

Need any more?	
23.1%	Vehicles
38.5%	Dumpsters
7.7%	Personnel
0%	Other _____ _____

11. How much additional work will be required by your collectors to insure used oil filters are not dumped?

38.5% An overburdening amount
38.5% A lot
15.4% A moderate amount
7.7% A little
0% Practically none

12. If fines are chosen as a means for assuring compliance at landfills, which of the following scenarios would you prefer?

38.5% Flat fine for every used oil filter
7.7% Fine by ton assessed when one is found in a load
30.8% Fine by ton, assessed when one is found in a load, which has a sliding fee scale so the fine is small for a first time or occasional infraction, but increases for repeat offenses
23.1% Don't know / No answer

13. Can you think of any other way landfills might be able to enforce the ban, other than fining those who do not comply? Feel free to suggest new ideas!

Don't sell filters across the counter. Make the only way to get one be from a service center and they have to install and dispose of them.

I can't think of any better ideas, I'm just complaining about the above question because it makes the hauler the "bad guy" to the customers.

Not really, but if you are considering a ban on any item from our landfills you better be prepared to hire a lot of people to clean up our ditches, because that is where you are going to find it all!

Pay \$1 per filter like pop cans. Cost can be added to purchase price.

Public inspections and education.

14. As a percentage, how much would instituting a used oil filter ban where haulers collect used oil filters from both commercial and residential customers increase your costs of running your business?

Percentage of Respondents	Percent Increase
7.7%	1
7.7%	10
15.4%	20
7.7%	30
7.7%	40
7.7%	100
46.2%	No answer

Again, as a percentage, how much would it increase your costs if haulers were ONLY required to pick up oil filters from commercial generators? _____%

Percentage of Respondents	Percent Increase
7.7%	1
7.7%	5
7.7%	10
7.7%	15
7.7%	20
7.7%	30
7.7%	100
46.2%	No answer

15. Would you pass the increased cost of collections onto your customers?

- 76.9% Yes
- 7.7% No
- 7.7% I do not know
- 23.1% No answer

Does your business have the financial resources to absorb any additional costs associated with complying with the ban until the additional cost could be recouped?

BOTH commercial and residential ban	Commercial ban ONLY	
7.7%	7.7%	Yes
0%	0%	Probably
61.5%	61.5%	No
7.7%	7.7%	I do not know
23.1%	23.1%	No answer

16. If used oil filters are banned from landfills, something must be done with them. Usually their contents are separated and the scrap metal is sold. If there isn't enough infrastructure - reprocessors/recyclers, dumpsters for businesses, collection for residents, etc. - to handle the additional oil filters, what should be done?

- 7.7% Nothing. In the long-run the market will correct itself and provide capacity.
- 0% State government will need to provide grants and loans to spark development.
- 76.9% Used oil filters should not be banned unless there is another means in place that is acceptable to dispose of them.
- 7.7% I do not know
- 7.7% No answer

Section IV. Public Outreach

17. Currently, to properly dispose of a used oil filter it should be hot drained and punctured before throwing it away. That simply means the top of the filter must be drained near operating temperature and above room temperature for a length of 12 hours and be punctured so more oil may drain out of the filter.

- 23.1% This is new information to me
- 69.2% I was previously aware of this information
- 7.7% Don't know / No answer

18. Think back to the last time there was a landfill ban instituted at a landfill your business uses, whether the ban was local or statewide, how long in months did it take before “compliance” was reached?

Percent of Respondents	Months
7.7%	2
7.7%	3
15.4%	6
15.4%	24
7.7%	48
46.2%	Don't know / No answer

19. In your own words, please tell us how your business would educate all its customers about a used oil filter ban?

Computer letters to all customers with bills.

I think it would be the DNR's responsibility to educate consumers.

It is not a haulers place to do this.

Newspaper ad and customer letter.

Newspaper and flyers.

Newspaper, letter with statements.

Put a piece in the paper and on TV about no oil filters in garbage cans. Go to the commercial businesses and talk to them one on one about the oil filters ban.

We would include the information in our billing.

20. In your opinion, how much reinforcement will the average customer need to become educated about the ban?

38.5% A great deal

38.5% A fair amount

7.7% Some

7.7% A little

0% Once is enough

21. Used oil filters are small and hard to spot in your weekly garbage pick up, so it is likely that if a customer threw one away during a ban, no one would know. Realizing that, how big of a fine, in dollars, would it take to stop the average person from throwing away a used oil filter in the garbage? \$_____

Percent of Respondents	Dollar Amount
7.7%	\$10
7.7%	\$20
7.7%	\$25
30.8%	\$100
7.7%	\$500
38.5%	Don't know / No answer

What about commercial generators? \$_____

Percent of Respondents	Dollar Amount
30.8%	\$100
23.1%	\$500
7.7%	\$1,000
38.5%	Don't know / No answer

Section V. Last Thoughts

22. Think back over the survey. We asked you a variety of questions about how a used oil filter ban would affect your business and its operations. In your own words, are there any other issue areas the procedure needs to take into consideration to make sure a specific material can be banned?

Don't do this.

This is going to be really hard to deal with.

You must find a way to create disposal sites before you ban something.

You need to know in advance how you, the DNR, are going to clean up our waterways and ditches once your ban takes effect. Also need to know where the money to pay for these procedures is going to come from and is it cost comparative to banning an item in the first place?!

Section VI. Experience with Alternate Disposal

Now we need to ask you a few questions for the sake of comparison.

23. There are statewide bans that prohibit lead acid batteries, yard waste, and whole tires from being disposed of in landfills. Special measures have to be taken to deal with these types of waste. Does your business handle collections for alternate disposal of the following waste? (Check all that apply)

7.7%	Oil
15.4%	Lead acid batteries
23.1%	Tires
46.2%	Yard waste
23.1%	Other; please specify: Appliances Certain appliances Corrugated cardboard in clean vehicles

24. Does the landfill(s) your business uses ban anything besides lead acid batteries, yard waste, and whole tires?

84.6% Yes

0% No

15.4% I don't know

For those who answered yes, what are the other materials that cannot be disposed of in the landfill(s) your business uses?

Appliances
Appliances, metal, oil, OCC
Cardboard (3)
Corrugated cardboard, heavy metals, ammunition
Liquid paint and chemicals
Microwaves, cardboard, refrigerators, computer monitors, certain appliances,
metal
OCC
Oil and chemicals
Oil filter; appliances

Section VII. Business Demographics

25. Which of the following best describes the business structure of your firm?

69.2% Privately owned and operated
7.7% Public entity (city, county or multi-jurisdictional hauler)
23.1% Other: Corporation

26. Which landfill(s) does your business use? (If you work for a large hauler, we are only referring to those collectors in your office or region.)

Adair County
Adair County Landfill, Guthrie County Landfill, North Dallas County Landfill
Audubon County, Adair County, Guthrie County
Audubon, Adair, Mills, and Cass County
Benton County, Bluestem, Cedar County, Iowa City, Jones County, Muscatine, Iowa County
Metro Waste Authority, South Dallas, South Central
Montgomery County Landfill
Page County Landfill
Union County Landfill
Scisna, and Mahaska City
SEMCO, Wapello County, GROWA, Lee County
Shelby County and Audubon County
Union County Landfill
Union County Landfill
Union County, and Clarke county

27. To the best of your ability, please describe your service area, the geographic area from which your firm collects waste, using county and city names.

Adair County, Bridgewater, Fontanelle, greenfield, Orient

Adam County - Prescott, Taylor County - Gravity, Lenox, Sharpsburg
 All rural Audubon County including city of Gray. All rural Adair County including commercial in
 Adair County. Western five miles rural Guthrie County.
 Benton County, Linn County, Johnson County, Cedar County, Jones County, Muscatine County,
 Washington County, Iowa County
 Clearfield, Iowa, Blockton, Iowa Rural area pickup
 County we are in - Guthrie, Adair and Dallas Counties. Stuart, Menlo, Casey - Adair towns.
 Des Moines Metro Area, Dallas County, Warren County, Madison County
 Montgomery County (owned by IA Waste Systems) - Villisca, Stanton and Red Oak, Page County
 - Clarinda and Shambough, Taylor County - Lenox
 Oakland - Pottawatomie. County, Exira - Audubon County, Massena - Cass County, Adair - Adair
 County
 Shelby County east Half and Audubon County West Half
 Small cities and rural
 Small municipal and rural
 South East Iowa

28. Approximately how many customers do business with you?

Number of residential customers reported:

200
 280
 600
 700
 800
 1,000
 1,805
 4,000
 4,400
 7,000
 9,000
 Total

customers =

29,785

No Answer =

2 haulers

Number of commercial customers reported:

21
 45
 75
 100
 200

1,000
1,500
1,600
Total customers = 4,541
No Answer = 2 haulers

Of your commercial customers approximately how many are service stations or while-you-wait oil change shops?

1
2
3
4
6
10
20
Total customers = 121
No Answer = 2
haulers

29. How many employees do you have?

Full-time (40 hours per week)

1
4
14
15
20
23
90
Total employees =
167
No Answer = 4 haulers

Part-time (less than 40 hours per week)

1
2
3
Total part-time
employees = 6

30. What is your job title? _____

City Clerk

District Manager (5)

Owner (4)

Partner

President/Owner

Vice President

31. For the purpose of making sure our sample is representative of the entire state, we would like your 5-digit zip code? _____

50003

50025

50076

50116

50250

50801

50840

50846

50851

50864

51531

52244

52556

**Thank you for taking the time to participate.
Your answers will help shape state policy.**